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ABSTRACT

Five of the project teams of the Educational Quality Indicators (EQI) initiative of Alberta (Canada) came together to provide their perspectives on the initiative and to report their progress in developing local indicator systems that have the involvement and support of their respective communities. The conceptual framework of the EQI initiative, presented in 1989, addresses two essential questions: whether the students are learning to their potential, and whether the educational system is supporting student learning efficiently and effectively. Presentations at the symposium included: (1) "The Quality Indicators Strategy: Involving the Community" (Roger Mestinsek and Derek Taylor); (2) "A Collaborative Model for School and Program Evaluation" (Earle J. Warnica); (3) "School System Review: A Comprehensive Process" (Bernie Chandler); (4) "Measuring Social Competence in Students" (David G. Young); and "Signs of Learning in the Affective Domain" (Ralph Himsl and Esther Lambert). Discussants were Philip Nagy, Ontario Institute for Studies in Education, and John O. Anderson, University of Victoria. (SLD)

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Educational Quality Indicators:
Collaboration in Action

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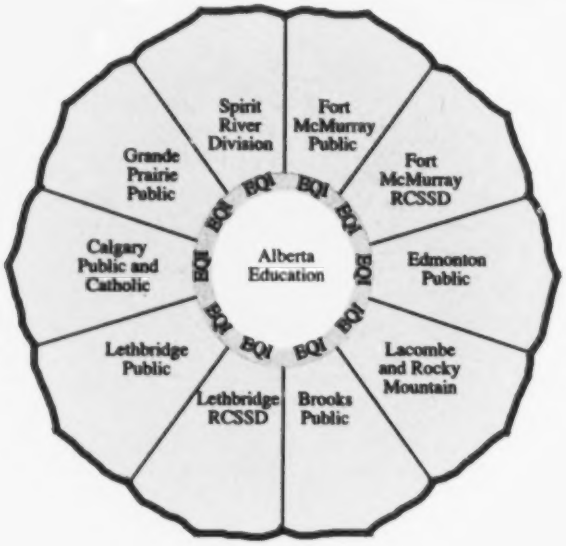

Symposium at the Annual Meeting of the
Canadian Educational Researchers' Association
Victoria, British Columbia, June 5, 1990

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Educational Quality Indicators: Collaboration in Action

Symposium at the annual meeting of the
Canadian Educational Researchers' Association
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Chair Nelly McEwen, Alberta Education

Presenters

The Quality Indicators Strategy: Involving the Community
Roger Mestinsek and Derek Taylor, Grande Prairie School District No. 2357

A Collaborative Model for School and Program Evaluation
Earle J. Warnica, Lethbridge School District No. 51

School System Review: A Comprehensive Process
Bernie Chandler, County of Lacombe No. 14 and Rocky Mountain School Division No. 15

Measuring Social Competence in Students
David G. Young, Fort McMurray School District No. 2833

Signs of Learning in the Affective Domain
Ralph Himsl and Esther Lambert, Lethbridge RCSSD No. 9

Discussants Philip Nagy, Ontario Institute for Studies in Education
John O. Anderson, University of Victoria

Preface

This symposium provides an opportunity to present and discuss Alberta's Educational Quality Indicators (EQI) initiative. At the 1989 meeting of the Canadian Educational Researchers' Association, McEwen and Zatko presented the conceptual framework and implementation plan for this initiative. This symposium brings together five of the project teams to provide their perspective on the initiative and to report their progress to date in developing local indicator systems which have the involvement and support of their respective communities.

Alberta Education is collaborating with twelve school jurisdictions to develop indicator systems to measure the success of the educational enterprise in the province. The indicators will provide information to assist in assessing the quality of educational programs and the delivery system by focusing on student outcomes. The proposed system has taken into consideration and reflects government policy and the goals of schooling. It addresses two essential questions:

1. Are students learning to their potential?

2. Is the educational system supporting student learning efficiently and effectively?

The EQI initiative will focus on developing indicator systems, establishing procedures, and reporting and disseminating the information to educational constituencies in Alberta. Figure 1 presents the expected outcomes for these three components.

Indicator Systems	**Methods**
interpretative framework • context • inputs • processes **student outcomes** • cognitive • affective • behavioral **points of reference** • time • groups • targets	**data sources** • available information • identify needs • develop measures **collection procedures** • student testing • surveys • documentation **analytic procedures** • quantitative • qualitative
Report and Dissemination	

Figure 1: Expected Outcomes of the EQI Initiative

The fundamental principle of the EQI initiative is that no single indicator, or even group of indicators, can fully describe the complexity of education. The proposed system will include many indicators, measured by both quantitative and qualitative methods, for selected dimensions. EQI intends to include indicators organized in logical clusters, measured in different ways, using information from multiple sources to describe education in such a fashion that meaningful interpretation and judgements can be made. The indicator system intends to *enhance* information about education for improved *action* in planning, policy and decision making.

A four-dimensional model of education was developed to guide the direction of this initiative. It consists of partners (schooling, family and society), conditions (context, inputs and processes), student outcomes (cognitive, affective and behavioral) and time (grades 3, 6, 9 and 12) (McEwen and Zatko, 1989).

The EQI initiative is sponsoring ten concurrent action research projects. One or more school jurisdiction(s) within the zone of each Regional Office of Education was identified and invited to participate. Each school jurisdiction prepared a proposal based on the Terms of Reference and submitted it for approval. The Planning and Policy Secretariat is providing funds to assist these jurisdictions to improve their assessment procedures and to share their results with others in the province. The information generated from the ten projects will assist Alberta Education to develop provincial indicators. The interpretation and recommended directions of the local indicator projects, together with other provincial initiatives, will provide a solid foundation for the implementation of an efficient and effective information system which measures the success of the educational enterprise in the province.

Each participating school jurisdiction is developing a local indicator system which includes the components identified in Figure 1: a set of indicators (including an interpretative framework, student outcomes and points of reference), methods (to collect, analyze and interpret the information), and a reporting and dissemination strategy (to inform diverse audiences of the results). Every project has three phases, each of approximately one year's duration. The first year, 1989/90, is developmental and the subsequent two years will result in field testing the prototype sets of indicators and methodological procedures and then refining them.

The five papers present different aspects of the principles behind EQI. The first three papers describe the involvement of the community in determining the goals and priorities of education in their respective school jurisdictions. The last two papers describe the development of a broader range of student outcomes to include the affective and social domains. The five papers provide a good representation of the types of activities taking place during this developmental year of the EQI projects.

Nelly McEwen, Coordinator
Educational Quality Indicators

The Quality Indicators Strategy:

Involving the Community

Roger Mestinsek and Derek Taylor
Grande Prairie School District No. 2357
on behalf of the Project Team

Paper presented as part of the symposium, "Educational Quality Indicators: Collaboration in Action", at the annual meeting of the Canadian Educational Researchers' Association, Victoria, June 5, 1990.

The Quality Indicators Strategy: Involving the Community

Grande Prairie Public School District No. 2357 operates ten schools in the City of Grande Prairie and has a current enrolment of 4500 students. Five of the present schools are elementary schools, one is an elementary-junior high school, one is a junior high school, one is a composite senior high school and one is an elementary-junior high school which offers programs and services to 150 multi-handicapped children and 350 children in regular school classes. A court school is also operated by the District under a contract with the attorney-general.

Extensive Special Education services are offered by the district, including programs for trainable mentally handicapped, educable mentally handicapped, and all levels of learning disabilities. Programs for gifted and talented students are also offered at elementary, junior and senior high schools.

In July of 1989 the District entered into a contract with the Minister of Education of Alberta. The District agreed to conduct a research project for the Minister to identify indicators that could be used to determine the effectiveness of a school system in developing positive student outcomes in the cognitive, affective and behavioural domains.

The Grande Prairie Quality Indicators Strategy has as its main emphasis and focus the stakeholders of education in the city of Grande Prairie. These stakeholders are defined as any person or group who: receives the educational product through instruction; uses the facilities or resources of the district; works for the district; contributes through taxes to the operation of the district; has siblings attending school in the district; or hires or further educates the students of the district. The project team has identified five major stakeholder groups including educators, parents, administrators, students and the public and has developed a strategy to gather their opinions on the quality of education in the city of Grande Prairie. The targeted stakeholders identified quality indicators for measuring the effectiveness of the school district and its schools. This paper will demonstrate that while some of the initial results were very predictable, some of the indicators were unique to the Grande Prairie Public School District.

Introduction

The Grande Prairie Public School District became involved with the Educational Quality Indicators study in order to find a way to measure the quality of education and the effectiveness of the product offered to students in the District. The related literature on effective schools, high performance schools, quality education, and accountability, provided the research team with many questions regarding reporting of school effectiveness. The project team used three simple questions to guide its research in the area:

Who wants to know?
What do they want to know?
How do we report what they want to know?

The problem was not only to identify quality indicators but also to develop a method to measure the attainment of the indicators and, finally, to report the results so that all stakeholders could understand and use the information. Particular

attention was given to the Grande Prairie scene to determine what is feasible for Alberta practice. The "feeling" of the city was taken from stakeholders who have a primary interest for determining the effectiveness of schools. An exploratory type of research was employed. In discussing the functions of exploratory studies, Selltiz, Jahoda, Deutsch, and Cook (1959) reported:

> Many exploratory studies have the purpose of formulating a problem for more precise investigation or of developing hypotheses. An exploratory study may, however, have other functions: increasing the investigator's familiarity with the phenomenon he wishes to investigate in a subsequent, more highly structured, study; clarifying concepts; establishing priorities for further research; gathering information about practical possibilities for carrying out research in real-life settings; providing a census of problems regarded as urgent by people working in a given field of social relations. (p.51)

The above authors suggest using the following methods in this type of research: a review of the related social science and other pertinent literature and a survey of people who have had practical experience with the problem to be studied.

The use of an ex post facto research model was determined by the following factors; the format would not allow any direct control of independent variables; the target groups could not be manipulated into categories which would be required for a true experimental or quasi experimental research design; and, the targeted population for the Grande Prairie study already possessed opinions and experiences with the educational system before the research started.

Further support to conducting an ex post facto research project was offered by Donald Ary (1972):

> We contend that any dissatisfaction encountered among clients "deprived" of a new program is a drop compared with the flood of dissatisfaction from taxpayers who discover that millions have been spent on programs that lacked a well planned method for determining whether the programs actually accomplished anything or not. (p.317)

The research team believe educators have relied too heavily on the results of standardized tests as the main source of feedback on the quality and effectiveness of the educational process. In a paper presented to the UCLA Center for the Study of Evaluation, Eva Baker (1988) states:

> Outcomes like student achievement test scores, college admission rates, or dropout figures represent the easy part of indicators. Quality indicators should also take into account input variables and measures of process. (p.37)

Baker (1988) goes on to say:

> Achievement testing will not go away, and for good reason. Students and, by implication, the schools to which they go must be held accountable for teaching students and attempting to measure what they have learned. (p.28)

The team was armed with many opinions from educational researchers such as Edmonds (1978), Brookover, and Lezotte (1977) on measuring school effectiveness. The related literature on effective schools, high performance schools, quality education, and accountability, provide researchers with many questions on the reporting of school effectiveness (Frederick, 1987). The development of the strategy for the Grande Prairie Public School District study involved looking at various projects conducted in the United States (Codianni, & Wilbur, 1983). This research provided a solid basis for understanding the work that had been done in the area of school effectiveness and quality indicators of that effectiveness at the time of the study. The team had to establish an appropriate method for measuring the quality indicators of the Grande Prairie Public School District as defined by the targeted stakeholders. There were many established instruments and methods which had already been employed by educational researchers in their attempts to define criteria for measuring educational quality. The 'Summary of Quality Indicators' study conducted by the Austin Independent School District cites indicators such as student achievement, college bound students, student diversity, basic skills, attendance and drop out rates in comparing the effectiveness of their district with other districts (District, 1987). The review of the research on quality indicators gave the project team a comfortable understanding of what to look for and provided a strategy to obtain the necessary data.

Phase One: District Report Card

Procedures

As indicated earlier, the first step in phase one was to identify the stakeholders of education in the Grande Prairie Public School District. The term stakeholder also had to be identified in terms that would enable the team to target appropriate groups for input. The second step was to establish a method or strategy to identify what the stakeholders perceived the quality indicators of the school district to be. In order to attain quality information, the stakeholders needed to be informed of the overall objectives of the Grande Prairie Project. The ultimate purpose of the study was determined and the methodology was also established by the project team. This information was presented to each stakeholder group as an introduction to the sessions which were designed to obtain their opinions on quality indicators of education for the district. After the introduction of the study, the stakeholders were asked to break into groups to brainstorm their quality indicators of an effective school district. After listing the items via brainstorming, the groups were asked to rate their indicators from most important to least important. Once the groups listed their items in order of priority, the groups shared their results with one another. The third step of phase one was to analyze the data obtained from the stakeholder sessions. The data was placed into a data base which identified the stakeholder group, the subgroup, the number of people in the subgroup, the date, and the prioritized quality indicators of that subgroup. All identified quality indicators were then placed on a spreadsheet and assigned a value of five points for a number one rating, four points for second place, three points for third place, two points for fourth place and one point for fifth place. The spreadsheet data is categorized into individual stakeholder groups and a blended group of all stakeholders. (See: Table 1)

Table 1
Number of Stakeholders Involved in the Grande Prairie Educational Quality Indicators Strategy

Groups	Number
Parents	35
Public	36
Students	241
Instructional Staff	229
Non-Instructional Staff	84
Administrators	36
Total	661

The project team will report back to all stakeholders surveyed during phase one to solidify the criteria identified during the stakeholder sessions. After the identification of stakeholders, the project team recruited volunteers to represent various community groups on a Quality Indicators Steering Committee. The team meets with this committee every three months to update them on the progress and to obtain feedback and direction on the project course.

Preliminary Results

The team is currently analyzing the data and deciding how best to report the findings. There have been some interesting results from the first phase of the surveys. All groups thus far have identified student achievement as one of the indicators of an effective school district. There are varying opinions, however, on the meaning of student achievement. The sessions conducted with the public sector indicates that items such as employability of graduates, respect, work ethic, attitudes and self esteem are considered to be measures of student achievement. Parent groups, educators and students hold standardized test scores, and district comparisons on provincial tests as measures of student achievement. Research in the United States indicates administrative leadership as a strong force in the measure of effectiveness. The initial results of the Grande Prairie survey indicate that few stakeholder groups rate Leadership in the top five indicators. Some groups, such as educators, do not mention leadership at all. The end goal of phase one of the study is to develop a report card for the district which will reflect the quality indicators identified by the stakeholders in phase one. To date, the school district has published a report card on its performance based on the measurable criteria they currently possess.

Reporting performance in this context was very well received by the school board and their enthusiasm provided much encouragement to the project team that they have chosen realistic and valuable objectives for the project. The purposes for reporting on the quality indicators of an effective school district are two-fold. Firstly, it provides all stakeholders in education in Grande Prairie with meaningful feedback on the educational process and its results. This feedback will report on criteria that is important and has been identified by the people who have a stake in what happens in the district. It will serve as a common basis for discussions and questions on the districts' performance. The process of developing and reporting on these quality indicators will result in more knowledgeable stakeholders. More knowledgeable stakeholders equate to more knowledgeable questions and solutions to concerns. The feedback will also help foster a community or team approach to education in the Grande Prairie Public School districts. Stakeholders can truly become partners in the business of educating youth.

Secondly, the district report card will serve as a blueprint for strategic planning to improve the delivery of education in Grande Prairie. All participants in the study understand there is nothing that can be done about past performance. The district report card will, however, provide us with a basis to target areas for improvement and a means of measuring whether or not the planned strategy is working.

It is very clear that the process of developing the report card will be just as valuable as the planned outcome. The educational industry can no longer make decisions and function in isolation from their stakeholders. Vicki Bowers (1990) makes a strong argument for more communication and feedback to stakeholders,

> The tragic thing is that schools teach exciting, useful and important things to youngsters. By not openly imparting that information to parents, schools deny the people who would be their best supporters the chance to speak knowledgeably. And that's self defeating, because well informed parents can counter the radical fringe more effectively than can school public relations people. (p.40)

Phase Two: School Report Cards

The second phase of the study will involve the development of school report cards. Schools will be asked to volunteer to work on the development of individual report card which will reflect the opinions of their school's stakeholders. The process of gathering these opinions will emulate the methods used in developing a district report card. The project team will work with the individual schools to identify and plan a time line to reach their stakeholders. It is expected that the quality indicators identified by the individual schools' stakeholders will vary.

In presenting phase one of the study to various stakeholder groups, differences were witnessed in quality indicators as the study was presented to various school communities. An example of this difference was in the results from educators in two separate elementary schools. Elementary school A listed indicators such as program equity, special programs, student motivation, and teachers involvement in decisions while Elementary school B listed different items such as; mainstreaming, resources, inservice, and Board/Teacher relations.

There will be an existing data bank from phase one of the study that can be used as a basis for discussion among the school stakeholder groups. For example, in the survey of the Parent stakeholders, the presentations were to existing school Parent Advisory committees. Each committee represented a specific school in the district. Similarly, the instructional and non-instructional staff were contacted on a school by school basis. The project team will contact as many stakeholders as possible using the nominal group technique described in phase one. Further data gathering may have to be accomplished using questionnaires or some sort of mass media campaign.

The resulting school report card from phase two of the study will include common items identified by all schools as well as the indicators specific to individual schools. The major work for the project team, once the quality indicators have been identified, will be the development of tools to measure the quality indicators and to effectively communicate the results to the stakeholders. As the data gathering process is still in its early stages, the number of indicators included in each report card cannot be determined. At the conclusion of phase two, each school will be provided with the means to gather quality indicator information on an annual basis.

It is expected that these annual report cards will serve stakeholders in determining the existing strengths and weaknesses of their individual schools and also serve as an instrument to collectively plan and improve the quality of their schools. Initial presentations during phase one of the study have already produced schools who wish to volunteer to develop report cards during phase two of the study. Phase two of the study will also see the project team identify a comparable school district to pilot the gathering and reporting of quality indicators. This school district can provide the study with valuable feedback on the usefulness of this process in schools and districts other than Grande Prairie. It will also serve to identify common indicators and disparities which exist from one school district to another.

Phase Three: Annual Report Cards

The final year of the Grande Prairie study will be the publication of annual report cards on the school district and each school within the district. The format of these report cards will be the same but, the identified quality indicators of each will reflect the differing opinions of each schools' stakeholders. The methodology used to gather and report on these indicators will be formalized so the data can be gathered and reported on a yearly basis. The final product will also serve as a basis for setting goals, planning change and measuring progress of each school from year to year. Administrators and teachers need not waste valuable time gathering data which has no significant value to the district or any other stakeholders. Education is unique in industry for its lack of feedback to its stakeholders. David Kearns says, "I can't think of any other single sector of American society that has absorbed more money by serving fewer people with steadily declining service" as cited by Mann (1990, p. 26).

Kearns goes on to say, "Teaching is the only profession I know of that if you do well, nothing good happens to you, and if you do poorly, nothing bad happens to you" (Mann, 1990, p. 26). The statements of David Kearns demonstrates the frustration exhibited by the public in dealing with education. A need has been demonstrated for more innovative methods of providing stakeholders

with feedback. Stakeholders can no longer rely on the convenience of standardized test scores and comparisons with national averages as the measures of the quality of the educational systems. In an article in the Executive Educator, John G. Weiss and Arnold F. Fege say, "Ultimately, instead of measuring the success of the public education system, standardized tests will dictate what is taught" . Weiss and Fege indicate in their article that what is measured becomes a key factor in determining behavior. "So there is every reason to believe the introduction of state by state comparisons of standardized test scores will influence the public's perception of each state's educational system." These changes, the authors believe, will result in the public demanding changes that would eventually harm schools. The authors state that the test were never meant to be a vehicle of change, yet that is what they are capable of becoming. In closing the authors say, "Unless we establish safeguards, we might find that standardized tests have become the tail that wags the dog" (Weiss, & Fege, 1988, p.14).

Educators, must begin to listen to communities and fellow educators and report on information that will provide a basis for change in education that will be positive and in the best interests of all stakeholders in education. Change is not an end product but an ongoing process. The ongoing process will reflect the changes in society and the job market to continuously educate youth with information that will be valuable to them for life. Education cannot be content with the philosophy that prevailed in the past where educators were providing students with knowledge and skills which are not required by industries of today.

References

Ary, D., Jacobs, L. C., & Razavieh, A. (1972). *Introduction to Research in Education* (Third ed.). Holt, Rinehart and Winston.

Baker, E. L. (1988). *The Effectiveness of American Education* . UCLA Center for the Study of Evaluation.

Bowers, V. (1990). What do parents want? Listen here. *The Executive Educator*, 40.

Brookover, Wilbert B., and Lawrence W. Lezotte. *Changes in School Characteristics Coincident with Changes in Student Achievement*. Occasional Paper No. 17. East Lansing: Michigan State University, 1977.

Codianni, A. V., & Wilbur, G. (1983). *More Effective Schooling from Research to Practice* (400-82-0012). National Institute of Education.

District, A. I. S. (1987). *Summary of Quality Indicators* . Office of Research and Evaluation.

Edmonds, Ronald. *A Discussion of the Literature and Issues Related to Effective Schooling*. Paper prepared for the National Conference on Urban Education, July 10 - 14, St. Louis, Missouri: Cemrel, Inc., 1978.

Frederick, J. M. (1987). *Measuring School Effectiveness: Guidelines for Educational Practitioners*. (ED 282 891). Office of Educational Research and Improvement.

Mann, D. (1990). It's time to trade red tape for accountability in education. *The Executive Educator*, 12(1), 3.

Weiss, J. G., & Fege, A. F. (1988). Warning: Standardized tests will dictate your curriculum. *The Executive Educator*, 10(10), 2.

A Collaborative Model for

School and Program Evaluation

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Lethbridge School District No. 51

Paper presented as part of the symposium, "Educational Quality Indicators: Collaboration in Action", at the annual meeting of the Canadian Educational Researchers' Association, Victoria, June 5, 1990.

A Collaborative Model for School and Program Evaluation

In recent years there has been a marked increase in the emphasis on carrying out program and school evaluations. In Lethbridge School District #51, and indeed throughout much of Alberta, the approach used has been predominantly "top down" with the planning and procedures carried out almost totally by personnel from the district central office and assisted by external resource persons. A meta-evaluation concluded that limited outcomes were being realized by the evaluations since the teachers and school-based administrators were not actively involved (except for having the process "done to" them) and hence gained little from the exercise. A study of the related literature and of procedures followed in other locations led to the proposal for a "collaborative model" and the empowering of school-based personnel to be actively and professionally involved in their program and school evaluations. The use of "educational quality indicators" serves as a key component of the proposed model.

Introduction

> ***"Serious conversations about education matters must precede the evaluation of school organizations, personnel, students and curriculum. It is through these conversations that we will be able to get our ideas straight about quality in education and about how to reach it."*** (Common, 1987, p.11)

In recent years, evaluation of teaching and of teachers has received in-depth study but little effort seems to have been put into whether the models and procedures used for the relatively new focus on school and program evaluations are consistent with the findings of educational research. Because the stated goal of evaluation is almost always school improvement, there is a need to consider and utilize the research on quality indicators, school effectiveness, and school improvement.

This study was based on the perceived need for an analysis of the procedures being used in one Alberta school jurisdiction to carry out program and school evaluations, and for the development of a new model based on the current research and literature in the areas of indicators of effectiveness, quality, and school improvement. The need to evaluate schools and programs was succinctly described by Goodlad (1984, p.1): "to survive, an institution requires from its clients substantial faith in its usefulness and a measure of satisfaction with its performance."

Background

In the province of Alberta, as in other Canadian provinces, and a number of American states there has been an increasing emphasis and expectation from governments that school jurisdictions will develop and carry out formalized procedures for evaluation, including the evaluation of students, teachers, programs, schools, and school systems.

This descriptive research project involved carrying out a case study of the model of school and program evaluation employed in Lethbridge School District #51 (LSD #51), a medium-sized Alberta jurisdiction of approximately 8,000 students and 450 professional staff. The Lethbridge model involved the use of a large team (up to

fifty five people) from the school district central office, other schools, Alberta Education offices, and the University of Lethbridge spending up to three weeks time on site for the school evaluation process. A common concern was whether the model (which was extremely expensive in terms of professional time and expertise) was producing payoffs in professional growth and development. Perhaps the most significant concern was with the problem of implementing the recommendations emanating from the evaluation report; members of the district support staff (consultants, coordinators, and superintendents) were so heavily involved with preparing for and carrying out the evaluations that they had little or no time to provide follow-up or assistance with implementing the recommendations made in the previous ones.

Purpose and Significance of the Study

"The most important purpose of evaluation is not to prove but to improve." Stufflebeam and Shinkfield (1985, p. 151).

Administrators and boards need assurance that their models of school and program evaluation are consistent with educational research and, therefore, likely to bring about increased effectiveness and school improvement as a result of the investments of professional time, expertise, and budget dollars. Stufflebeam and Shinkfield (1985) affirmed that if evaluations are to be useful and provide proper direction and guidance, "the evaluations themselves must be sound" (p. 183).

In carrying out this study, the following research questions were answered:

1. Is the current LSD #51 model for program and school evaluation consistent with the literature on indicators of effectiveness, quality, and school improvement?

2. Are the procedures, instruments, and data used in the LSD #51 model valid and reliable?

3. Does the current literature suggest characteristics or criteria of more effective and efficient models for program and school evaluation, in terms of indicators of effectiveness, quality, and improvement?

Review of Related Literature

"Put on one pair of glasses and our schools appear to be the worst of places. Put on another and they appear to be the best." (Goodlad, 1984, p. 10)

The following major areas of educational literature were reviewed as a basis for this study and the proposed model:
(1) school and program evaluation - theory and practice,
(2) effective schools research, (3) indicators of effectiveness or quality, (4) school improvement literature, and (5) evaluation models, criteria, and standards.

Purposes of school and program evaluations were succinctly stated by Stufflebeam (1971, p. 157) as "not to prove but to improve!" Other items from the literature revealed consistency in the view that schools and programs should be evaluated. Both Eisner (1985b) and Goodlad (1984) stressed the lack of public confidence in our schools. Eisner (1985b, p.1) suggested that, "It is possible that our entire educational system is near collapse." Common (1987) noted an apparent contradiction between what Maclean's magazine referred to as a crisis in Canadian and American schools (Finlayson, 1985), and the many Canadian research studies and polls showing that teachers, parents, and students regard our schools as doing a reasonably good job. Common (1987) concluded: "There is rightfully a justification for careful evaluation of the curriculum, the professionals and students, and the organization that constitutes public education" (p.9).

Meta-Evaluation: Evaluating the Evaluation

"Quis custodiet ipsos custodes?"

The above reference by Morgan (1986, p. 26) to "who guards the guards?" serves as a reminder that evaluations themselves need to be evaluated, and that those doing the evaluations need to be competent and trustworthy. He asserted that no one should be immune from evaluation, especially not the evaluators themselves. Levin (1983, p. 11) concurred and noted "Given the amount of time, effort and money which may be involved in an evaluation, and the importance which its results may have, school districts need to be sure that evaluations do 'deliver the goods.'"

Common (1987, pp. 11-15) strongly put forth a number of concerns about evaluation as it is now done. "When evaluation is a public action, it becomes a political activity in which power and powerless become central." She stated her opposition to external models for evaluation because they are costly, contentious, lower teacher morale, and generate data which may be used very little. She stated further that they promote an "impoverished view of education and deskill the teacher at a time when his (or her) professional skills are more important than ever." Her view is that external models of evaluation may stop curriculum innovation and, at best, are unlikely to make it start.

In considering the nature of evaluations, and what should take place, Stufflebeam and Shinkfield (1985, pp. 70-74) reported that Ralph W. Tyler (generally recognized as the founder of educational evaluation) considered that evaluation should determine the congruence between performance and objectives. This approach laid the foundation for an objective-oriented style of evaluation as far back as 1942.

In considering the "how" of evaluation, Eisner (1979, p. 267) expressed his strong view that procedures and criteria used to evaluate students, teachers, and school administrators "have profound effects on the content and form of schooling." He seemed to lend considerable support to the argument for school-based evaluation with his statement that, "The school is the basic unit of educational excellence" (p. 280). Goodlad (1984, p. 31) offered some related strategic advice when he stated that "efforts at improvement must encompass the school as a system of interacting parts, each affecting the others."

Scriven and Stufflebeam discussed "meta-evaluation" and the need for assessing evaluation criteria, processes, and techniques in *Standards for Evaluations of*

Educational Programs, Projects, and Materials (1981). Scriven (1976) stressed the fact that evaluators have a professional obligation to ensure that their evaluations are subjected to competent evaluation. He emphasized that it could be formative or summative and could include use of the "Key Evaluation Checklist." This checklist reflects Scriven's views that evaluation involves multiple dimensions and should employ multiple perspectives, utilizes multiple levels of measurement, and makes use of multiple methods.

Effective Schools Research

> **"It is vastly easier to describe effectiveness than to achieve it."** Leithwood and Fullan (1984, p. 12)

Research on effective schools had its genesis somewhat in response to the well-publicized works of Coleman (1966) and Jencks (1973). They held very pessimistic views that schools could do very little to reduce apparent inequality among children in terms of achievement.

Edmonds' work (1979) showed that some schools succeed where others fail and identified five characteristics of successful schools: principals who provide strong administrative and instructional leadership, high expectations that all students can and will learn, a school climate that stimulates learning (beginning with a building that is orderly and quiet without being repressive), students and staff who believe basic skills are urgently important, and a continuous system of monitoring student progress.

The major importance of school leadership was reiterated by Goodlad (1979) who asserted that the principal is the central figure in the attainment of a quality school program. Simultaneously, in Britain, Rutter et al. (1979) identified that it was the "ethos" or tone of the school that really mattered and identified the characteristics which yielded desired results as: firm leadership and teacher involvement in decision-making, positive climate, school organization and teacher skills, high level of expectations for learning and behavior, frequent use of rewards and praise, emphasis on learning, appearance and comfort of school environment, and opportunities for student participation and responsibility.

Over the decade of the 1980s, a body of literature known as "effective-schools research" developed, producing a remarkably consistent set of findings. Purkey and Smith (1983), after a wide review of studies, concluded that the findings of recent school-effects research contradict the conclusions of Coleman (1966), Jencks (1973), and others. Schools can make a difference!

Other related research supported the above conclusions. Shulman (1984, p. 6) defined effective schools as "those that are educative settings for teachers." A four -year study in British elementary schools by Mortimore and Sammons (1987) concluded: "much of the variation between schools can be accounted for by differences in school policies and practices within control of the principal and teachers" (p. 4). Although not writing about teaching, Peters and Waterman (1982) found that the best-run companies were outstanding not because they were able to recruit and hire extraordinary people but because they were able to motivate average employees to extraordinary dedication and performance.

Of significant interest is the observation from the literature that not all researchers and writers on the topic are committed to the effective school philosophy; a number of criticisms have emerged. Glickman (1987, p. 624) argued that schools and researchers have failed to distinguish between good and effective schools and that "The 'effectiveness' movement is unnecessarily restricting the curriculum, narrowing the teaching approach to direct instruction, and controlling teachers."

Cuban (1984) also identified problems with the effective-schools research including that no one knows how to create effective schools, the language is fuzzy, effectiveness is constricted to test results, and most research was done in elementary schools. Stedman (1987, p. 222) concurred and argued, "If we continue to evaluate schools with narrowly designed standardized tests then we will get narrowly structured schools to impart such skills."

Stedman (1988, p. 442) advocated considering an alternative approach based on cultural pluralism, academically rich programs, personal attention to students, and shared governance with parents and teachers. Fullan (1985, p. 414) cautioned that "Nothing would be worse than establishing a grand scheme putting all schools in the district through the paces of developing effective school plans."

It is evident that evaluations of programs and schools must look well beyond the criteria commonly associated with the effective-schools movement. Evaluations must be broadly-based and multi-dimensional.

Indicators of Effectiveness or Quality

A new body of literature is beginning to evolve and offers promise as a means of describing effectiveness and quality it education. The development of "indicators" is providing a new focus and emphasis in educational studies and in schools.

Common (1987, pp. 10-11) described quality in education as a "mental construct," and elaborated that:

> "What we deem to be quality in education and the criteria we use to judge it is as much a product of the morality and other values of the times as it is the product of what we know about what we are doing. The secrets of what we deem quality in education to be lie not in the measurements we take, but in the judgements of worth that we make about those measurements."

Murnane and Pauly (1988) stressed the importance of developing multiple indicators, and Kaagan and Smith (1985) pointed out that indicators provide information about the health of a school system but cautioned that a common set of indicators would almost certainly increase the move toward centralization. A British Columbia study by Coleman (1986) introduced an element called school/district "ethos" or goodness as a potential predictor of school effectiveness.

In the view of Porter (1988, pp. 504-505), the use of indicators could lead to more centralized control over the education system in terms of what, how, by whom, and to what standards things are taught. His pessimism was offset by the statement that "designing and implementing a system of educational indicators could become one of the first steps toward the meaningful participation of teachers in

setting educational policy" (p. 506). Porter foresaw the possibility of enhancing the professional status of teachers if they participated in the design of the indicator system but was also cognizant of the danger that participation in the development process "could result in . . . the lowest common denominator of current practice" (p. 508).

The Colorado Department of Education (1982) presented indicators of quality in 12 categories, with a total of 42 indicators: curricular congruence, assessment, leadership of principal, high expectations, school-wide norms, values, practices and policies, school climate factors, monitoring and feedback of student progress, time on task, organization and management of the instructional setting, instructional effectiveness, and parent and community involvement. This list bears a striking similarity to the effective-schools criteria discussed earlier in the review of literature and should be of considerable use in meeting the purposes of this study.

In both Alberta and British Columbia considerable efforts are underway using the concepts of indicators of quality. The British Columbia Ministry of Education (1986, p. 16) presented an evaluation model of three components: goal statements, quality indicators, and an interpretive framework (the judgments and views of professionals and members of the public who are knowledgeable about education). McEwen and Zatko (1989, p. 13), on behalf of Alberta Education, provided examples of indicators of students' cognitive, affective, and behavioral outcomes. The cognitive indicators which they suggested as examples included achievement on provincial and standardized tests, program participation, diploma type, graduation rate, dropout rate, and scholarships. Affective indicators included satisfaction with schooling, self-esteem, motivation, values, and attitudes toward school, subjects and work. Their indicators of behavioral outcomes were in two categories, physical and social. The indicators of physical behaviors were fitness, health (nutrition, hygiene), and freedom from substance abuse, social diseases, pregnancy, and suicide. The indicators of social behavior included the set of desirable personal characteristics adopted by the government of Alberta - ethical/moral, intellectual, and social and personal.

The Ministere de l'Education, Gouvernement du Quebec (1989), published a set of indicators as one means of responding to the demand for accountability in public administration. Their indicators were presented in five categories:

(1) Financial resources, including spending in relation to GNP, school board spending per student, student-teacher ratio, and average teacher salaries.

(2) Progress through school, measured by numbers reaching and completing secondary school, falling behind, or dropping out of school.

(3) Evaluation of learning, such as secondary school examination results by sex, school system, language of instruction, type of education, and considering regional disparities, and subjects.

(4) Secondary school graduates in terms of numbers and types of diplomas, numbers going on to college, and numbers joining the work force.

(5) Adult education including spending by board, and numbers of adult graduates.

In the United States of America, The Office of Educational Research and Improvement (1987) presented the following "outcomes" as indicators: reading performance, writing performance, college-entrance examination scores, high -school completion by race and ethnicity, literacy skills of young adults, and participation of high-school graduates in postsecondary education. The "resources" listed as indicators were expenditures per pupil, pupil/teacher ratios, and teacher

salaries. The 'context' indicators were school enrollment (by age groups), aspects of home environment, student drug and alcohol abuse, teacher job satisfaction, school problems as seen by teachers and the public, public opinion ratings of schools, and state high school graduation requirements.

Some cautions are warranted by the indications of serious defects as pointed out by Winters (1985) in the California high school quality indicator program. She warned that the quality indicators are uninterpretable, and can be misleading. It is the view of the researcher that this need not be true since the indicators are developed by teachers and should be written in such a way that they can be interpreted easily.

School Improvement

"Change is a process, not an event!"
(Hall and Loucks, 1977, p. 17).

Since the goal of school and program evaluation is the improvement of schools, it is important to consider the literature on improvement. Close similarities exist between the findings here and to the research on effective schools.

Leithwood and Fullan (1984) proposed six strategies for increasing the chance of successful change: continuous professional development, increasing principal effectiveness, school planning, developing policies with a view to their implementation, using standard operating procedures, and building systematic problem-solving procedures.

Fullan (1985) went even further and presented a set of school-level strategies. This included developing a plan, investing in local facilitators, allocating resources, selecting schools, and deciding on the scope of project, developing the principal's leadership role, focusing on instruction, stressing ongoing staff development, ensuring information gathering and use, planning for continuation and spread, and reviewing the capacity for future change.

Lezotte and Bancroft (1985) noted that successful local school improvement programs have in common a focus on a single school, a building-based improvement team, a longer-term orientation (three to five years) in planning and implementation, and are organized around the concept of the effective school as in research.

Wood, Freeland, and Szabo (1985) noted the present thrust for school improvement differs from the past in that the target is no longer the district or individual staff member, but the school. Their conclusions were that the primary method for achieving improvement is not curriculum development but staff development, that the source of improvement is not just intuition but research on effective schools and effective instructional practices, and that planning is no longer year-to- year responding only to immediate needs, concerns and problems, but is proactive, long range, and systematic.

Naisbitt (1982, p. 3) appeared to lend support to this school-based model of improvement with his statement: "Trends are bottom-up, fads top-down." He advocated moving away from the specialist who is soon obsolete to the generalist who can adapt to a "high-tech/high-touch" world. Although he was speaking

mainly about businesses, Naisbitt's ideas, "long-range plans must replace short-term profit," could apply equally to schools (p. 82); he declared that "strategic planning is worthless - unless there is first strategic vision" (p. 94). Naisbitt's views that "Followers create leaders. Period." (p. 101) summarizes the change in focus. According to the Saskatchewan Minister's Advisory Committee (1985, p. 7), the impetus can come from outside the school but planning and action must occur within. "School improvement is about taking action at the local level."

In conclusion, the school improvement literature has presented several propositions and strategies for school change. The consistent emphasis on school -level development is incorporated into the section of this case study which proposes a prototype for school and program evaluation for Lethbridge School District #51.

Evaluation Models, Paradigms, Criteria, and Standards

In the opinion of the researcher, the most significant debate related to the best model for school evaluation focuses on external versus internal format; should the evaluation be conducted by external evaluators or be done at the school level by school-based personnel? Goodlad (1984, p. 31) addressed this issue with his statement, "The approach having the most promise is one that will seek to cultivate the capacity of schools to deal with their own problems, to become largely self -renewing."

Eisner (1985b, p.378) further supported the school-based approach: "The school is the basic unit of educational excellence." Good and Brophy (1986, p. 586) made their contribution to the debate on school evaluation models in stating that one criterion for judging plans might be the percentage of faculty involved in developing the plan and the number who accept it.

Consideration by Morgan (1986) of both the "top-down" and the "collaborative" systems led him to conclude that the most successful systems of evaluation are likely to be based on a collaborative approach since it assures acceptability which may be more crucial than validity and reliability. He stated a principle that program evaluation is "the mirror image and complement of performance appraisal" (p. 61), and that effective teaching is demonstrated by appropriate and effective use of curricular and program materials and methods. As a note of caution, he stressed that instead of focusing only on classroom observations, there should be wider and more varied forms of appraisal including assessment of the diagnosis, planning, choice of strategy, choice of materials, and methods of teaching.

Common (1987, p. 15) advocated strongly against external accountability because it "will prove costly and contentious, and may lower teacher morale." She argued further that external evaluations would generate data which might be used very little, which could deskill the teacher, and which could cause curriculum innovation to stop.

Shaw (1987-88, p. 434) proposed three primary stages of school evaluation: self-study phase, team-visit/reporting phase, and implementation phase. He advocated that local school staff members could effectively utilize their self-study instruments, discussions, and activities to identify their school's limitations and develop a plan for school improvement. Shaw believed that after a thorough self -study is undertaken and accomplished, visiting team members could serve as external validators for the work of the local staff but cautioned that school evaluators

should recognize they cannot learn as much during the three-day visit as local staff members already know about their school program. The study reported findings comparing the evaluative judgments of local school staff members with those of visiting team members; 13 of the 19 items showed no significant difference, five showed significant difference, and two items were rated higher by the visiting team (related to student behavior) while four were rated higher by local staff members.

Novak (1985) asserted that too much stress, time, and money are invested in the formal preparation and visit involved in external evaluations, even though agreeing that schools could benefit from some periodic outside review. This work suggested broader involvement of the educational consumer in the design and operation of the evaluation process. He advocated shortening the external visitation, while acknowledging staff insecurities if there are insufficient visiting subject specialists to cover every discipline.

An Australian model by Boud and Donovan (1982) documented a set of principles to guide the practice of evaluation: teachers are the people who have to implement the changes, decision-making is devolved to schools, internal evaluation replaces external evaluation, and all members of the school participate in the process. Boud and Donovan concluded that participation in the process was just as important as the implementation of the changes, and teachers reported that much of the benefit was as a result of their involvement in
the planning and conduct of the evaluation.

Herman (1986, p. 3) suggested a model involving a "top-down, bottom-up" approach which is school-district based but oriented to meet school building, classroom, and state needs. She noted the main problem with existing top-down models was that the people at the bottom (teachers and local administrators) were seen as data providers rather than data users and that paperwork and bureaucratic burdens intruded into, rather than supported, school operations and improvement efforts. "Bottom-up" needs were not being met.

Wilcox (1989, p. 188-189) noted in her British Columbia study of school and program evaluation models that "although their opinions about a program are sought, rarely do stakeholders have control over the direction the evaluation takes." Toffler (1980, p. 431) added arguments in favor of localizing decision-making and action planning in order "to cure today's decision logjam." He stated that we need to divide up and reallocate the decisions, sharing them more widely and "switching the site of decision-making as the problems themselves require."

In British Columbia, the Ministry of Education has developed procedures for accreditation which serve the school and program evaluation function since accreditation is defined in the *Accreditation Booklet for Secondary Schools* (1983, p. 2) as "the outcomes of an internal and external evaluation." Internal evaluation is undertaken by the staff and administration within the school and is designed to encourage and assist in the improvement of the school by its own initiative and effort. External evaluation is undertaken by an external committee and is designed to provide an evaluation in a broader frame of reference to confirm or question the internal evaluation (p. 2).

A few Alberta school jurisdictions place significant emphasis on a school-based model of school and program evaluations. The Spirit River School Division #47 employs the B.C. model of internal and external evaluation. The Edmonton Public School Board employs a school-based decision-making model which also applies to

school and program evaluation. Edmonton utilizes school-initiated and school-based evaluation by staff to assess school-based programs. Such evaluations are designed, administered, and analyzed by school staff with assistance (on request) of central office support services. Teachers complete self-awareness inventories to clarify their understanding of the program and prepare them for their discussions regarding their classroom practices, and to prepare them for classroom observations and conference questions. At the district level, they have produced outcomes and expectations in language arts and mathematics and are working on them in other subject areas. Their curriculum is defined in terms of intended outcomes, expectations, and sample indicators. District achievement tests have been developed based on grades 3, 6, 9, and 12 in language arts, mathematics, science, and social studies. In addition, program evaluations are periodically undertaken at the district level by curriculum development staff.

In the case of the Calgary Board of Education, the principal (with cooperation of staff) assesses all aspects of the school climate and operation, employing school self-evaluation, assisted by supervisory personnel external to the school. District-area office personnel review the annual school self-evaluation activities which have been put together into a "School Profile" - a framework to help document and assess present practices and set priorities for future action. Their approach is based upon models from England, and described in a document from the City of Salford, England, *Schools Looking at Themselves* (1983) and a publication, *Keeping the School Under Review*, by Casey and Malion (1982). It is grounded in the basic assumptions that school evaluation is a continuous process by which the school sets out to improve itself, that schools differ within the parameters of the provincial School Act and board policies, that involvement of principal and staff is fundamental, and that most decisions should rest with them with the school seeking external advice and assistance as it judges appropriate.

This researcher, after a thorough review of the literature, and based on a career in education and evaluation, concludes that the decision on the debate related to the external versus internal evaluation model falls clearly on the side of the school-based model. The convincing arguments of Boud and Donovan (1982), Common (1987), Herman (1986), Toffler (1980), and Eisner (1985) provide compelling reasons for a model which involves more active and professional participation of school-based personnel. The empowerment of school-based teachers and administrators, and the school as the focus of action and development offer the greatest potential for real growth and development of the school, its staff, and its programs for students.

Research Methodology

"Looking through one eye never did provide much depth of field." (Eisner, 1981, p. 9)

This research study, a meta-evaluation, utilized a descriptive-design, case-study approach since it dealt with matters primarily qualitative in nature, but also used some correlational design features as required in analyzing certain data. The views of Patton (1980, p. 40) who observed that "researchers using qualitative methods strive to understand phenomena and situations as a whole; evaluators using qualitative methods attempt to understand programs as a whole" would support this approach.

Stake (1978, p. 5) observed that case studies will often be the preferred method of research since they may be "epistemologically in harmony with the reader's experience and thus to that person a natural basis for generalization." Patton (1980, p. 304) presented a strategy for carrying out a case-study and a format for a report outline (p. 340) which has been used in this research. Guba and Lincoln (1981, p. 376) presented a rationale for doing a case study rather than the more conventional technical report for a naturalistic evaluation.

Eisner's views (1985a, p. 358) support the approach utilized in this Lethbridge study with his statement that "The model of natural science on which educational research is based is probably inappropriate for most of the problems and aims of teaching, learning, and curriculum development." He advocated that educational connoisseurship (the art of appreciation) and educational criticism be "not limited to the artistic description of events" but also include "their interpretation and appraisal" (p. 155).

The literature was clear and convincing that for the type of naturalistic research being done in this study, a qualitative case-study design, supplemented by some limited statistical analysis, was the preferred mode for the problem identified.

Sources of Data, Data Analysis Procedures

The notion of "grounded theory" as emerging from the bottom up (rather than from the top down), attributed to Glaser and Strauss (1967), and reported in Bogdan and Biklen (1982, p. 29), stressed using the many disparate pieces of collected evidence that are "interconnected." The Lethbridge study made use of such data since large quantities of information had been collected in the past three years of school and program evaluations, using instruments designed by Lethbridge School District and similar to those used in other districts in Alberta and by Goodlad (1984). The Lethbridge results were compared to the findings of Goodlad.

In order to control for the possibility of researcher bias a "panel of experts" was employed for inter-subjective validity verification. This panel consisted of four school principals who had their schools evaluated using the Lethbridge model. They were asked for their assessment of various aspects of the model and procedures which were followed. Their responses were compared to the assessment made by the researcher.

The data collected from students, teachers, and parents were analyzed to check for degree of association using Pearson product-moment correlation *(r)*, and also compared with data from the Goodlad (1984) study. The data-gathering instruments were assessed. The Lethbridge model was analyzed and criticized based on the findings from the literature on indicators of educational quality, effectiveness, and school improvement, other school and program evaluation research, and the statistical analyses.

Responses from the "panel of experts", along with other data and information from the research study, were used in a procedure of triangulation to address the sufficiency of the data and to reach some conclusions on the model currently being employed.

Findings (Analysis and Meta-Evaluation)

"The complete act of evaluation . . . involves both description and judgment." (Guba and Lincoln, 1981, p. 380)

A strong positive relationship was found between the information obtained from other aspects of the school evaluation process and the conclusions reached based upon the data from the analyses of the parent, student, and staff surveys. The grades awarded by each group (parents, students, and teachers) in Lethbridge are somewhat higher than those noted in the Goodlad study. The difference in ratings of the Lethbridge schools from those in the Goodlad study may be accounted for by the fact that the studies occurred in different countries with different social and economic environments. The education system in Canada has not suffered to the same degree from the low levels of public confidence and support as has occurred in the United States.

A Pearson *r* coefficient of correlation was computed on the ratings of the researcher and the Panel of Experts. The correlation was computed to be 0.6 which can be interpreted to be a "high" relationship according to Morehouse and Stull (1975, p. 198).

An analysis showed the areas of greatest agreement between the researcher and the Panel of Experts. The researcher and the panel gave highly positive ratings to statements covering several aspects of the process. These included communication with the evaluation team, opportunity for parental input, recommendations which were reasonable and accurate, an evaluation report which was presented in draft form to the school prior to its finalization and release, and the fact that the school developed a plan to respond to recommendations. Similar strongly positive agreement existed in terms of the present model being predominantly "top down", and the need for greater involvement of teachers and school-based administrators. Both the researcher and the panel gave low ratings to the attention paid to school social inputs and to the clarity of the evaluators' role after the report was written.

The researcher was much less positive than was the panel that the input of school administrators and teachers in the present model was adequate. Close agreement existed between the researcher and the panel in a number of other areas.

The usefulness of the evaluation report was rated fairly highly by each.

The approach to school and program evaluation as used in the Lethbridge models encompasses virtually every one of the indicators of effectiveness presented by Squires et al. (1983) in their questionnaire for assessing school and classroom effectiveness. The Lethbridge models appear to meet Goodlad's (1984) assertion that efforts at "school improvement must encompass the school as a system of interacting parts each affecting the other" (p. 31). The broadly based emphasis of the models with a focus on all aspects of the school ranging from instructional programs to non-instructional programs acknowledges that each part of the school's operation affects all other aspects.

The Lethbridge model adequately addresses many of the checkpoints of the Key Evaluation Checklist developed by Scriven (1976) in terms of description, clients, function, consumer, process, outcomes, generalizability, significance, and reporting. In the view of the researcher and confirmed by the Panel of Experts, there are some problems with the delivery system, the standards by which programs are evaluated (the lack of a clear set of indicators of educational quality), the usefulness of the outcomes (since there are problems in implementing recommendations), the costs, and the thoroughness of the meta-evaluation.

The lack of absolute standards by which programs can be compared and assessed is a weakness of the Lethbridge models. Another area where the Lethbridge models are weak, according to The "E Standards" as produced by North Central Association Commission on Schools (1987-88), is in teacher involvement in assessing the effectiveness of the program and planning for its improvement. The present school evaluation procedures in Lethbridge place teachers as recipients of the process and of the recommendations for change with little real and meaningful involvement in determining the nature of changes desirable. Teacher involvement comes into place in the present models only after the external evaluators have determined what changes should be made. The present school evaluation models include procedures to check that the characteristics common to effective schools are in place.

The lack of clearly established and accepted indicators of educational effectiveness or quality is one of the major weaknesses of the Lethbridge approach to school evaluation. Although many of the qualitative and quantitative indicators may be inferred in the Lethbridge models, they are not specifically identified and looked for as part of the evaluation. Little emphasis is placed on interpretive indicators of context, input, and process, or on outcome indicators of a cognitive, affective, or behavioral nature. A set of standards or bases for comparison is absent. The result is that judgments are made about program quality and effectiveness without the strength of a set of agreed-upon standards.

The literature on school improvement leads to some criticisms of the school evaluation model in question. The concerns of Leithwood and Fullan (1984) have not been addressed adequately. They believed that successful change involves pressure gradually acquired through interaction with peers and other leaders, not an imposed pressure mandated by authority. The present evaluation models place emphasis for change from the pressure brought about by the evaluation report instead of from interaction with peers. Similarily, the collaborative planning as espoused by Patterson, Purkey, and Parker (1986) is limited and restricted by the present models. The current LSD #51 approach does not utilize the suggestions of

Landon and Shirer (1986) in the Wisconsin School Evaluation Plan to have the school conduct a self-evaluation which is then audited by an outside team.

Wood, Freeland, and Szabo (1985) stressed a focus on staff development instead of the traditional emphasis on curriculum development, and for planning that is proactive, long range, and systematic. The Lethbridge evaluation model is not consistent with the suggestions of these and several other researchers in the area of school improvement.

Summary, Conclusions, and Recommendations - Revising the Model

"Trends are bottom-up, fads top-down." (Naisbitt, 1982, p.3)

The findings of the case study are that the Lethbridge School District #51 model for school and program evaluations has generally been perceived to be moderately effective and has led to significant efforts at school and program improvement. The major strengths of the model are the involvement of large numbers of people in providing data on which evaluative judgments can be made. All stakeholders have adequate opportunity to make input and have their views known. Another perceived strength (which is also a weakness) is the use of a large team of external evaluators with a strong range of program and administrative strengths. The credibility of the evaluation team is strong. The countering weakness is that with such a large and strong team, the model has become heavily "top-down" with little real opportunity for meaningful participation and professional growth by those who are the recipients of the evaluation - the school staff and administrative team. The lack of teacher involvement and interaction with peers in assessing the effectiveness of their own programs and then planning for improvement is a fundamental concern.

The model was judged to be very strong in its examination of a broad range of student behaviors, teacher behaviors, school climate, student achievement, and expectations for success. The focus on all aspects of the school encompassing both instructional and non-instructional programs was positively evaluated. The multidimensional nature of the model is a strength. Some uncertainty exists as to whether the information gained from the model is of sufficient value in terms of professional growth and improvement to warrant the cost of human resource time and energy.

Other major concerns with the model are the lack of a clearly established and accepted set of standards or indicators of quality and the problems in implementing the recommendations when members of the district central staff are heavily committed to carrying out other evaluations. The thoroughness of the "evaluation of the evaluation," whereby the evaluation process and model is regularly evaluated, is another weakness of the model.

This case study found that the Lethbridge model satisfied many of the criteria of effectiveness, quality, and improvement in terms of receiving input from all

stakeholders, utilizing an evaluation team with expertise and credibility, and using a multidimensional focus to examine a broad range of both instructional and non-instructional aspects of the school. The model was judged by the researcher to have limitations in that it was "top-down" with little opportunity for meaningful participation and professional growth by the school staff and administration. There are strong doubts as to whether the information gained from the model is of sufficient value related to professional growth and improvement to warrant the heavy costs of human resource time and energy. A major weakness of the model is the lack of clearly established and accepted sets of standards or indicators of quality. Concerns with the ability of schools to implement the recommendations leads to serious questions about whether significant improvements will come about.

This case-study determined that the procedures and instruments used had strong face, content, and construct validity. No attempt was made to demonstrate external validity since the purpose was not to generalize the conclusions reached at one school to another one. Some doubts about reliability and validity were raised since the items were not field tested and some items were changed from school to school with loss of comparability of certain results. Although reliability (internal consistency or stability) was never calculated, the instruments appear to be consistent as indicated by the high correlations which were found.

The literature was clear that there are certain criteria and characteristics which could be incorporated into the Lethbridge school evaluation procedures to increase effectiveness and efficiency:

1. The new model should move away from the heavy emphasis on a "top-down" approach to encourage and empower school staff and administrators to be actively involved and interacting in assessing the effectiveness of their own programs and planning for their improvement. A model involving a better balance between internal and external evaluation should be considered. School -based subject-area evaluation by internal sub-committees, followed up by a review by the external team to confirm, question or add new factors to the assessment is recommended.

2. The development of a clear set of standards or indicators of educational quality would be a desirable step in moving the evaluation model onto more objective ground, and would allow, perhaps even demand, much more professional involvement of school level personnel. Indicators should be developed by school-level committees of teachers and administrators, and shared with and revised as necessary by other schools. The process of developing educational quality indicators is an evolutionary one; the result, after a period of approximately three years, should be a district-wide set of indicators which have been teacher-developed and validated. The indicators may vary somewhat between schools and particularly between levels or divisions to take into account their unique features. Indicators should consider the school social inputs such as the student body composition, and the school social structure and climate, and should focus on student outcomes in the cognitive, affective, and behavioral domains with reference to context, inputs, process, comparators, and standards. The work of McEwen and Zatko (1989), Shedlin (1986), and the Alberta (1989b) and British Columbia (1986) papers on quality indicators have produced numerous examples of quality indicators in the various domains.

3. Evaluation of the teaching staff and evaluation of the principal need not be a part of the school and program evaluation process. The principal should

assume full responsibility (with assistance and delegation as required) for teacher evaluation, while principal evaluation should be carried out under the direction of the district superintendent.

4. The Lethbridge model, to become more effective, should improve its approaches to and emphasis on implementation; the central- office resources and professional expertise should not be so heavily involved with planning and carrying out other evaluations that they cannot be available for the most important of all steps in the evaluation process which is implementation of recommendations.

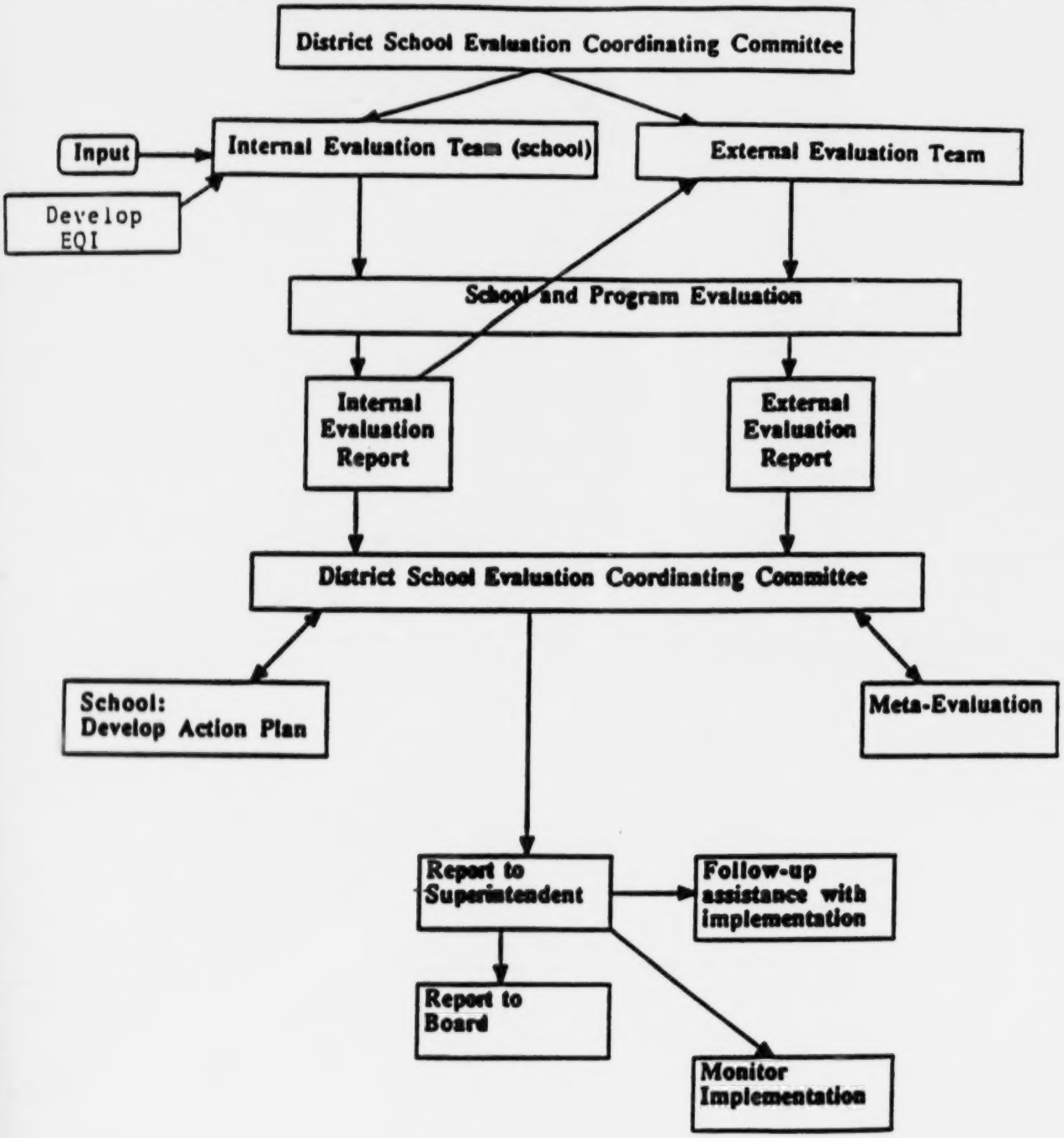
5. More deliberate and thorough efforts must be put into meta-evaluation whereby the model and processes would be evaluated by all stakeholders in the process and coordinated by a district school-evaluation coordinating committee. All who were involved in the process of evaluation and all who have a stake in the school should have input into the meta-evaluation. The board of education, as recipients of the evaluation report, should also have significant input into the meta- evaluation in terms of whether it produced necessary and useful information. Related information on the value and effectiveness of the educational quality indicators developed by each school will come from the judgements of the teachers in other schools who will make use of these (or a modification of these) indicators in their own school and program evaluations. This will assist in refining the process of developing quality indicators.

6. School and program evaluation in LSD #51 should be an ongoing process and not simply an event which takes place once every five to seven years. The new model should assure that program and school evaluation becomes a natural and vital part of the curriculum and instruction cycle. Each school in LSD #51 should develop a school- and program-evaluation component as a part of its operational plans.

7. In the long term, school and program evaluation should be happening simultaneously in all schools of LSD #51; the only scheduling required from the district should be for the external evaluation component.

Figure 1

Proposed Collaborative Model for School Evaluation



Proposed Collaborative Model of School Evaluation

Based on the findings of the case-study, a new model for school and program evaluation is proposed. The diagram (see **Figure 1**) contains a proposed collaborative model for the evaluation of schools and includes all the criteria and characteristics outlined earlier in this chapter to improve the effectiveness and efficiency of the existing Lethbridge model. This collaborative model places much greater responsibility and control in the hands of school-based administrators and staff. They become major participants and decision-makers in program and school evaluation, in identifying areas of program and professional growth, and in bringing about change.

The model rests upon certain basic assumptions grounded in the literature on school effectiveness and school improvement. The school is the primary unit of decision-making (Smith and Purkey, 1985). If changes are to occur, they require ownership that comes from the opportunity to participate in defining change, and the flexibility to adapt it to individual circumstances; change does not come from externally imposed procedures (Fullan, 1982). School evaluation should be a continuous process. Schools want to identify areas requiring improvement and will actively work toward this end if the conditions are right. Schools differ within the parameters of school-district policies and provincial legislation; these differences must be recognized and acknowledged in the evaluation and improvement processes.

Empowering school-based staff and administration is fundamental to reviewing and improving the school; an empowered school-based staff, with assistance from external expertise (as required), will make strong professional decisions regarding their own program improvement and professional development. The entire school, the environment in which students learn, and ultimately the students themselves, will be the benefactors. Glickman (1989, p. 8) supported this view of school improvement. He stated that "schools will not improve until those people closest to the students - the teachers - are given the choice and responsibility to make collective and informed decisions." He elaborated by stating that "supervision must shift decision making about instruction from external authority to internal control." Speaking of teachers, he stressed that "without choice and responsibility, they will comply, subvert, or flee; and motivation, growth, and collective purpose will remain absent."

The two areas of literature, school improvement and school-based management, are brought together by David (1989, p. 45). She asserted that "school-based management is rapidly becoming the centerpiece of the current wave of reform." If school and program evaluations are for the purpose of instructional improvement or reform, then the conclusions of David (1989), Glickman (1989), Smith and Purkey (1985), Fullan (1982), and others can not be ignored. This researcher is convinced, based on the literature and on personal experience in the field, that the school-based empowerment approach is the one most likely to bring about the desired staff, program, and school development.

The Lethbridge EQI Project - Future Directions

The present model of program and school evaluation as used in Lethbridge School District #51 was evaluated according to recent research findings on school effectiveness, quality indicators, and school improvement, and according to theories and practices of sound evaluations. It was found to be adequate in many of the criteria of effectiveness, quality, and improvement, but to be insufficient in a number of other important ways identified from theories and practices. The proposed collaborative model adds a number of features which should empower school-based administrators and staff, strengthen the evaluation processes, and increase school improvement and professional development and growth. The proposed model will be implemented on an experimental basis in Lethbridge School District #51, evaluated, and modified as necessary to strive toward the achievement of sound program and school evaluations and the ultimate goal of improved educational experiences for students.

Based on the literature and on the results of the case-study, a new approach to school and program evaluation is underway in Lethbridge School District #51. The Lethbridge EQI project involves implementation of a collaborative model of program and school evaluation with emphasis on the development of educational quality indicators. Key components of the development of educational quality indicators are the collaboration between school-based and district-based staff, and the resulting determination of comparators, standards, and targets for all programs. These educational quality indicators will focus on student outcomes in the cognitive, affective, and behavioral domains, and will be developed within an interpretive framework which places emphasis on context (the basis for interpreting the variations among different groups), inputs (the number and type of resources available and allocated) and process (the actions or operations which result in an outcome). Data from surveys of students, teachers, parents, and the public will be analyzed and quality indicators established in terms of comparators, standards, and targets. The result will be each school evaluating its own educational quality and effectiveness in a professional manner which serves to empower school-based staff and contribute to meaningful and effective school growth and improvement.

References

Alberta Education. (1989). *Educational quality indicators - Terms of reference.* Edmonton: Alberta Education, Planning and Policy Secretariat.

Bogdan, R. C., & Biklen, S. K. (1982). *Qualitative research for education - An introduction to theory and methods.* Boston: Allyn & Bacon Inc.

Boud, D. J., & Donovan, W. F. (1982). The facilitation of school-based evaluation: A case study. *Journal of Curriculum Studies, 14,* 359-362.

British Columbia Schools Department, Ministry of Education. (1983). *Accreditation Booklet For Secondary Schools.* Victoria: Author.

British Columbia Schools Department, Ministry of Education. (1986). *Evaluating the progress of schools: Indicators of quality.* Victoria: Author.

Casey, M., and Malion, S. (Ed.). (1982). *Keeping the school under review.* London: ILEA Learning Resources Branch.

City of Salford, England. (1983). *Schools Looking at Themselves.* Salford, England: Education Department, City of Salford.

Coleman, J. S. (1966). *Equality of educational opportunity.* Washington: Government Printing Office.

Coleman, P. (1986). The good school district: A critical examination of the adequacy of student achievement and per pupil expenditure as measures of school district effectiveness. *Journal of Education Finance, 12*(1), 71-96.

Colorado Department of Education, School Improvement and Leadership Services Unit. (1982). *Listing of items from indicators of quality schools.* Boulder: Author.

Common, D. L. (1987). Evaluation and quality in public education: Six points to remember. *Education Canada. 27*(3), 8-15.

Cuban, L. (1984). Transforming the frog into a prince: Effective schools research, policy, and practice at the district level. *Harvard Educational Review 54,* 129-151.

David, J. L. (1989). Synthesis of research on school-based management. *Educational Leadership. 46(8),* 45-53.

Edmonds, R. (1979). Effective schools for the urban poor. *Educational Leadership, 37(1),* 15-24.

Eisner, E. W. (1981). On the differences between scientific and artistic approaches to qualitative research. *Educational Researcher, 10(4),* 5-9.

Eisner, E. W. (1979). *The educational imagination.* New York: Macmillan.

Eisner, E. W. (1985a). *The educational imagination* (2nd ed.). New York: Macmillan.

Eisner, E. W. (1985b). *The art of educational evaluation - A personal view.* Philadelphia: The Falmer Press.

Finlayson, A. (1985, September 23). In search of educational excellence. *Maclean's*, pp. 6-7.

Fullan, M. (1982). *The meaning of education change.* New York:,Teachers College Press.

Fullan, M. (1985). Change processes and strategies at the local level. *The Elementary School Journal, 85(3)*, 391-421.

Glaser, B., & Strauss, A. L. (1967). *The discovery of grounded theory: strategies for qualitative research.* Chicago: Aldine.

Glickman, C. D. (1987). Good and/or effective schools: What do we want? *Phi Delta Kappan, 68(8)*, 4-9.

Glickman, C.D. (1989). Has Sam and Samantha's time come at last? *Educational Leadership, 46(8)*, 622-624.

Good, T. L., & Brophy, J. E. (1986). School effects. In M.C. Wittrock (Ed.) Handbook of Research on Teaching. (3rd ed.). New York: Macmillan.

Goodlad, J. I. (1984). *A place called school.* New York: McGraw Hill.

Gouvernement du Quebec, Ministere de l'Education. (1989). *Education Indicators for the elementary and secondary levels.* Quebec: Author.

Guba, E. G., & Lincoln, Y. S. (1981). *Effective Evaluation.* San Francisco: Jossey-Bass.

Hall, G., & Loucks, S. (1977). A developmental model for determining whether the treatment is actually implemented. *American Educational Research Journal, 14*, 263-276.

Herman, J. (1986). *Evaluation for school improvement: A multi-level,multi-purpose model.* Los Angeles: UCLA, Center for the Study of Evaluation.

Jencks, C. (1973). *Inequality.* New York: Harper & Row.

Landon, G. L., & Shirer, W. R. (1986). Practical approach to school improvement. *Educational Leadership, 44(1)*, 73-75.

Leithwood, K., & Fullan M. (1984). Fostering long-term growth in school system effectiveness. *The Canadian Administrator, 24(3)*, 6-13.

Levin, B. (1983). What to expect from a good evaluation study and how to make sure you get it! *Ontario Education, 15(3)*, 11-14.

Lezotte, L. W., & Bancroft, B. A. (1985). Growing use of the effective schools model for school improvement. *Educational Leadership, 42(6)*, 23-27.

McEwen, N., & Zatko, G. (1989). *Educational quality indicators: Framework for action.* Edmonton: Alberta Education, Planning and Policy Secretariat.

Morgan, G. A. V. (1986). *Performance appraisal in the school systems of Ontario.* Toronto: Ministry of Education.

Mortimore, P. & Sammons, P. (1987). New evidence on effective elementary schools. *Educational Leadership, 45(1)*, 4-8.

Murphy, J., & Hallinger, P. (1985). Effective high schools - What are the common characteristics? *Bulletin, 69(477)*, 18-22.

Naisbitt, J. (1982). *Megatrends.* New York: Warner Books.

North Central Association Commission on Schools. (1987-88). Leadership for quality evaluation: A manual for visiting team members. *The North Central Association Quarterly, 62(3).* 423-424.

Novak, B. J. (1985). Evaluation criteria for secondary schools: How well does the system work? *Bulletin, 70(485)*, 84-90.

Office of Educational Research and Improvement. (1987). *Elementary and Secondary Indicators in Brief, 1987.* Washington: Author. (ERIC Document Reproduction Service Number ED 295 341).

Patterson, J. L., Purkey, S. C., & Parker, J. V. (1986). *Productive school systems for a nonrational world.* Alexandria, VA: ASCD.

Patton, M. Q. (1980). *Qualitative evaluation methods.* Beverley Hills: Sage.

Peters, T., & Waterman, R. (1982). *In search of excellence.* New York: Harper and Row.

Porter, A. (1988). Indicators: Objective data or political tool? *Phi Delta Kappan, 69(7)*, 503-508.

Rutter, M., Maughan, B., Mortimer, P., Ouston, J., & Smith, A. (1979). *Fifteen thousand hours: Secondary schools and their effects on children.* Cambridge: Harvard University Press.

Saskatchewan - Minister's Advisory Committee. (1985). *School improvement.* Regina: Author.

Scriven, M. (1976) Evaluation bias and its control. In G.V. Glass (Ed.) *Evaluation Studies Review Annual, 1.* Beverley Hills: Sage.

Shaw, R. C. (1987-88). A comparison of evaluative judgments by local school staff members and by members of visiting team. *North Central Association Quarterly, 62(3)*, 434-438

Shedlin, A., Jr. (1986). New lenses for viewing elementary schools. *Phi Delta Kappan, 68(2),* 223-224.

Shulman, L. S. (1981). Disciplines of inquiry in education: An overview. *Educational Researcher, 10(5),* 5-23.

Smith, M. S., & Purkey, S. C. (1985). School reform: The district policy implications of the effective schools literature. *Elementary School Journal 85,* 352-390.

Stake, R. E. (1978). The case study method in social inquiry. *Educational Researcher, 7,* 5-8.

Stedman, L. C. (1987). It's time we changed the effective schools formula. *Phi Delta Kappan, 69(3),* 215-224.

Stedman, L. C. (1988). The effective schools formula still needs changing. *Phi Delta Kappan, 69(6),* 439-442.

Stufflebeam, D. L. (1971). The relevance of the CIPP evaluation model for educational accountability. *Journal of Research and Development in Education, Fall,* 19-25.

Stufflebeam, D. L., & Shinkfield, A. J. (1985). *Systematic evaluation.* Boston: Kluwer-Nijhoff Publ.

Stufflebeam, D. (Chair). (1981). *Standards for evaluations of educational programs, projects, and materials.* Joint Committee on Standards for Educational Evaluation. New York: McGraw Hill.

Toffler, A. (1980). *The third wave.* New York: Morrow.

Wilcox, T.G. (1989). *Program evaluation in education: School district practice in British Columbia.* Unpublished doctoral dissertation, University of British Columbia.

Winters, L. (1985). *Technical Trouble Spots in the California High School Quality Indicator Program.* Palos Verdes Peninsula Unified School District, CA. (ERIC Reproduction Service Document ED 269 448).

Wood, F. H., Freeland, R., & Szabo, J. (1985). School improvement is more than *school* improvement. *Educational Leadership, 42(6),* 63-66.

School System Review: A Comprehensive Process

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Paper presented as part of the symposium, "Educational Quality Indicators: Collaboration in Action", at the annual meeting of the Canadian Educational Researchers' Association, Victoria, June 5, 1990.

School System Review:

A Comprehensive Process

This paper describes the cooperative development of a comprehensive school system review process based on student outcomes as well as the inputs and processes that contribute to those outcomes. The focus is on developing an assessment process for the whole school system to meet two needs: the demand by the public for accountability, and a desire by the school system personnel to demonstrate their ability to improve educational programs.

Introduction

The County of Lacombe and the Rocky Mountain School Division, two rural school jurisdictions, have had an interest in the development of an *educational quality indicators system* for some time. Because of their concern for accountability and school improvement, both jurisdictions have since 1985 conducted student, parent, public and employee surveys on their satisfaction with the school systems . As a result, when the opportunity arose to become involved in the provincial initiative on *educational quality indicators*, the two jurisdictions submitted a successful project proposal to develop a more comprehensive review process based on a quality indicators system.

The project was approved in April, 1989 and will consist of three phases over three years: development, field-testing and implementation. The first section of the paper presents the background to the development of the comprehensive review process, including the purpose, outcomes expected and related literature. The second section describes the conceptual framework and the development of the components of the review process. The final section describes future developments and makes some observations about the project.

Purpose and Outcomes of the Study

The purpose of the project is to develop a comprehensive school system review process which can assess the relative health of educational systems by focussing on both student outcomes, and the inputs and processes that contribute to those outcomes.

The development of this school system review process will result in: a clear statement of goals of student learning; a system of quality indicators for all goals of student learning; an interpretative process that will relate context, input and process variables to the outcomes achieved, and a plan for enhancing the strengths and improving areas of weakness. All of the components of the review process will be developed through the full involvement of the educational partners, thereby enhancing support for the project.

Related Literature

As public demands for accountability and improved educational productivity have grown, the interest in developing *educational quality indicator* systems to assess the quality of schools, districts and provincial and national educational systems has increased. The result has been a proliferation of articles and papers on not only developing appropriate indicators but also providing the processes on data collection, analysis and reporting of findings.

This literature review has been completed in two general sections: articles and papers about the development and implementation of quality indicator systems, and those papers that analyze the inputs and processes that affect student learning. A cross-section of papers and studies includes: studies on input, process and outcome indicators, data-collection, analysis and reporting. The second part of the review provides a number of meta-analyses of several hundred studies on factors that affect student learning in addition to specific studies.

Education quality indicators are generally defined in the literature as statistical measures that assess or are related to a desired outcome of the educational system, or describe a central feature or features of the system (Oakes, 1986). They are usually expressed as a number which can be compared longitudinally with system results, or externally with other jurisdictions' results. Indicator systems are defined as organized sets of vital signs from which it is possible to make judgements about the health of an educational system (Goertz, 1989; Oakes, 1986).

The literature suggests that effective indicator systems should include data on educational inputs, processes and outcomes (Fraser, Walberg, Welch, and Hattie, 1987; Haertel and Katzenmeyer, 1989; Walberg, 1983.) *Inputs* include variables over which schools can exert some influence such as resources and teacher characteristics, as well as contextual factors over which jurisdictions have no control, such as student mobility and socio-economic status . *Processes* are defined as the set of activities that expose students to the opportunities to learn (Fraser et al, 1987) and include such variables as classroom and teaching practices, and curriculum content and quality. *Outcomes* refer to the results achieved including student achievement, participation rates and attitudes.

The literature identifies a number of characteristics of effective quality indicators. Indicators should : measure a central feature of the system (Office of Education Research and Improvement, 1988), provide a benchmark for determining progress or regression over time, and be understood by all concerned with education (U.S. Department of Education, 1985). Quality indicator *systems* should be based on a local interpretation of provincial goals of schooling, and limited to a small number of measures to avoid interference with instruction (David, 1986). These systems should also include: logical clusters of indicators and a variety of data collection sources (Goertz, 1989), involve school and district staff in developing the indicator system (David, 1986), and to be useful for improving education, input and process variables must be related to outcomes (Haertel and Katzenmeyer, 1989; Goertz, 1989).

The literature suggests three general methodologies for collection of information (Buccino, 1989; Overgaard, 1988): review of documents such as annual reports, census data and records; testing which includes provincial assessments, diploma examinations, standardized tests and locally developed tests, and surveys including opinion questionnaires, interviews and polls.

To fulfill the demand for accountability and to demonstrate the effectiveness of the school systems, the literature suggests that care must be taken to design and publish appropriate reports. Goertz (1989) suggests a number of factors that should be addressed in designing these reports:

- primary purpose
- primary approach (descriptive/analytical or both)
- intended audiences
- frequency of publication
- level of reporting units (district / school reporting).

From the reports on quality indicator system projects, it is evident that effective presentation of the data includes a combination of methods; a comprehensive printed public report; presentations to community groups by trustees and administrators; newspaper, radio and television clips summarizing the results of the review; and school newsletters to parents.

The literature review on inputs and processes that affect student learning indicates three categories of findings: *student* aptitude related variables; *instructional process variables* (including instructional methodology and organization, and school and system effectiveness); and *context related* variables such as home environment, peer group and parental attitude toward education.

The literature relative to student aptitude suggests that intellectual ability, developmental stage and motivation (Fraser et al, 1987) are strong indicators of student success. As well, many instructional methodology and organization variables were found to positively influence student achievement including: reinforcement and cooperative learning (Fraser et al, 1987); time on task and individualized instruction (Walberg,1983); and wait time (Wise and Okey, 1983). Additionally, the school effectiveness literature identifies a number of other factors which positively affect outcomes including: teacher inservice (Sweitzer and Anderson, 1983), focus on learning (Chandler, 1988), varied instructional methods that are responsive to student learning needs (Chandler, 1988), high expectations (National Regional Educational Laboratory, 1985) and a positive working environment (Mortimore, 1985). A number of contextual factors were found to correlate positively with student learning including: the family socio-economic status (Heyneman and Loxley, 1983); peer group attitude toward achievement; home environmental factors such as parental support of schooling (Fraser et al,

1987); and student, peer and parental support of traditional values such as the work ethic (Hanson and Ginsburg, 1985).

In summary, the literature on the development and implementation of a quality indicator system combined with a review of the research on inputs and processes that influence student outcomes provides the necessary information to develop a conceptual framework for the project which follows in the next section.

School System Review: Development of the Components

The conceptual framework, predicated on the sources that have previously been cited, provides overall guidance to the development of the components of the system review process. Besides describing the conceptual framework, this section outlines the process of delineating the goals of learning and identifying indicators and measures. In addition, the indicators, measures and methodology and the interpretative framework and process are described.

Conceptual Framework

The school system review process is based on an educational quality indicator system consisting of a set of indicators and related methodology to assess the performance of the school system on the achievement of its goals. The indicators should provide information to assist in "assessing the quality of educational programs and the delivery system by focussing on student outcomes" (McEwen and Zatko, 1989, p.1).

Specifically, an educational quality indicator system should include:

- a local interpretation of provincial goals of schooling and a range of cognitive, affective and behavioral goals;
- multiple indicators or clusters of indicators, to increase interpretative power, but be limited to a reasonable number of measures for which valid and useful information can be gathered;
- a focus on indicators that are enduring, easily understood, feasibly measured and generally accepted as valid statistics;
- a point of comparison such as a larger group or a previous result, and include input and process variables to assist in interpreting outcomes;
- information that can be readily used for planning improvement and policy decisions;
- all educational partners in the specification of goals and indicators, collection of information, interpretation of results and development of improvement plans;

- a reporting system that is accurate and timely with appropriate reporting for all administrative units.

The conceptual framework for the school system review process consists of five distinct but interrelated components:

1. a plan for involvement of partners in the specification of goals, identification of indicators and comparators, interpretation of results and the development of a follow-up improvement plan;

2. a comprehensive statement of the goals of student learning including cognitive, affective and behavioral goals with a delineation of goals that are the primary responsibility of the school and those that are shared with the family and community;

3. a system of indicators that measures all of the goals of student learning;

4. an interpretative framework including standards as well as context, input and process variables that affect achievement, and

5. a plan for the future that identifies strategies and related action plans to enhance student performance in areas of strength and to improve performance in areas req :iring attention.

The educational partners will be involved in the development of all components of the school system review process: the specification of goals, identification of indicators and standards, interpretation of results and the development of an improvement plan. Local committees in each jurisdiction,representing a broad cross-section of the educational community,will be involved in the developing the review process, in sanctioning directions for the project and in communicating the project progress to their groups. Additionally, direct involvement of parents, teachers and students in development of some components of the project will occur.

The development of a comprehensive statement of goals of student learning by the school jurisdictions is a necessary starting point for the system review. Clearly, evaluation must be based upon specific results that the jurisdictions wish to achieve taking into account provincially mandated goals and curricula. Accordingly, goals of schooling will be developed utilizing a process that provides the educational partners with the opportunity to meaningfully interpret provincial goals within the local context. The comprehensive goals statement will include cognitive, affective and behavioral goals of student learning and delineate which goals are the primary responsibility of the school and which are a shared responsibility between the school, family and community. This distinction is necessary to meaningfully interpret and understand the outcomes achieved, as well as to assign responsibility for improvement plans.

Once the goals of student learning are established they will become the focus for the development of a system of quality indicators designed to measure the degree to which all of the agreed upon goals are being achieved. The system of indicators

will be developed through direct and full involvement of parents and staff and should be guided by the qualities previously identified in the introduction to the conceptual framework. Through this process, acceptance of the indicators and measures will be developed.

In addition to clearly articulating system goals and appropriate indicators or clusters of indicators, to measure the degree to which established goals are being achieved, the indicator system will include an interpretative framework including comparators as well as context, input and process variables that affect student achievement. Through this interpretative process, educational outcomes can be fully understood when they are analyzed in relationship to the local context - which tends to be relatively fixed- and inputs and processes, which can be modified to achieve desired results.

Once the indicator system is established and the student achievement of goals is determined through measurement and interpretation, the local steering committee will develop strategies and related action plans to enhance student performance in areas of strength and to improve performance on goals requiring attention. A modified strategic planning process (Cook, 1988) will include:

- reviewing the strategic policies of district;
- completing internal and external environment assessments;
- reviewing the results achieved by the district in relation to the established goals;
- identifying critical issues and concerns;
- establishing specific improvement goals;
- developing strategies to achieve the goals, and
- reviewing the education quality indicator system to ensure that it will provide required data to monitor progress and performance.

Developing the Components

The following section indicates the process of developing the specific components of the review process which include delineating the goals of student learning and identifying indicators, measures and comparators. The section concludes with a description of the interpretative framework and process.

Comprehensive Statement of Goals: The project steering committee in the County of Lacombe and the Rocky Mountain School Division met for two full days to delineate a comprehensive statement of goals of student learning. In developing this statement of goals, the committee considered a number of goal statements from the Department of Education including: the goals of schooling,the shared goals of

education, the goals of elementary and secondary education, the statement of desirable personal characteristics of students, and essential concepts, skills and attitudes of senior high students.

To assist the committees in dealing with these various statements, the project coordinator regrouped all of statements into four categories of goals:cognitive, social, personal and vocational (areas of overlap were noted). In addition the committees were provided with guidelines for developing and assessing goal statements:

- any goal must include the intents of provincial goals;
- local goals can be added to the provincial statements;
- the goals of schooling as well as the goals of education must be evaluated;
- each goal must be mutually exclusive;
- any comprehensive statement of goals must include: cognitive, behavioral and affective goals;
- all goals must be measurable.

The group processes that were organized resulted in gaining consensus on fourteen goals in the County of Lacombe and fifteen in Rocky Mountain School Division.

Following this developmental process the goals were communicated to various groups by the steering committee members as well as through Superintendents' newsletters. Although no feedback was received at this point, the goal statements were refined in the next stage of the process when indicators and measures where identified. Participants at this stage found overlap between goals and concluded that other goals were not measurable. As a result the statement of goals, which is included in the Appendix, has been modified and now contains eight goals in each school system.

The significance of this exercise of developing a goal statement is that these jurisdictions now have a statement of goals of student learning with a local flavor that all educational partners understand and accept as the basis for educational programs and the starting point for identifying indicators essential to the review process.

The Process for Identifying Indicators and Measures: The purpose of this development was to identify outcome indicators and existing or required measures to assess student achievement on the previously specified goals of student learning. Meetings involving parents and teachers in the County of Lacombe and Rocky Mountain School Division were held to identify educational quality indicators, existing or required measures and comparators. Workshop sessions were held in each school in the two jurisdictions at which time the project was outlined,

indicators and measures were identified, and recommendations for other necessary measurement instruments were considered.

At the meetings after an initial presentation to explain the project, answer questions and outline the task, individual goals of student learning were then assigned to groups of five people to consider, discuss and make recommendations. For some of the sessions the groups were organized on the basis of subject interest and began their discussions on the goals specifically related to the subject or group of subjects. During later sessions the process was varied by starting with the more abstract goals which tended to relate to all subject areas. Lists of existing indicators and measures to describe them were accumulated as well as requirements for new measures to be developed. These were provided to the next group, which considered the goal either at the beginning of their discussions or at the conclusion. At the end of the group discussion, a general closure session was conducted to tie the process together and to encourage on-going discussion and submissions.

In addition to identifying indicators and measures, the meetings succeeded in increasing awareness and support for the project and the use of multiple indicators since there was a general concern about using single indicators to describe the quality of education. They also served as a catalyst for participants to think about what schools are responsible for accomplishing. As a result the statement of goals of student learning was refined. Suggestions were made about clusters of indicators and interpretation of results, such as the relationship between achievement, participation rates and dropouts, the grade levels at which measures were suitable and the nature of survey instruments. The process also served to make the participants realize and accept that quality indicators are a reality of life at this time and that it is important for them to be involved in the identification of suitable measures. The opportunity for participants to influence and mold the review system so that it is suited the schools of the area was considered extremely important.

After initial identification of the indicators and measures by parents and teachers, a full review by project personnel was conducted to ensure consistency from goal to goal and to ensure necessary measures of performance for each goal. These indicators and measures were then reviewed by each of the local steering committees and categorized as a high or low priority. The high priorities were those which would be developed immediately, whereas the low priorities were those that will be developed later in the project.

Although an initial set of indicators and measures for student outcomes had been identified, it was recognized that further review and development was necessary to ensure that appropriate measures were identified and developed. In particular, the recent inventory of assessment instruments (Alberta Education, 1990) needed to be examined to determine whether there were suitable instruments for measuring some of the goals of learning. Furthermore, investigation of possible use of measures from other Alberta Educational Quality Indicator projects needed to be considered, particularly those projects involved in identifying indicators of affective and behavioral outcomes.

The Indicators, Measures and Comparators: Through the workshop sessions and the review of the literature, a list of outcome indicators relevant to any system review were identified. The indicators were identified in three categories: cognitive, affective and behavioral. The cognitive indicators included achievement, program participation, completion rates, independent learning and problem solving; the affective indicators were student satisfaction, self-concept, self-esteem, values, attitudes, motivation and aspirations; the behavioral indicators were desirable characteristics, attendance and locus, community service, image, health, fitness, participation in related activities and post secondary registrations. Appropriate comparators were also identified for all indicators. Table 1 gives an example of clusters of indicators, the measures and comparators for one goal of learning: developing knowledge, skills and attitudes in language and communication.

The measures to describe student outcome indicators generally fall into three major categories:

- tests which include diploma examinations, provincial achievement tests, standardized tests and locally developed tests;
- existing documents such as records and reports; and
- surveys including opinion questionnaires and participation in activities.

In general, there appear to be sufficient measures that are readily available in each of the three areas. The five exceptions are measures for: speaking and listening; writing skills for grades 8 and 11; commitment to the use of resources and preservation of the environment; fitness, nutrition and hygiene and healthy lifestyles. Additionally, the survey instruments for obtaining opinions from students, parents, the public, employees and alumni needed to be refined while at the same time ensuring consistency with the previously - administered instruments in the jurisdictions.

Information will be collected directly through examinations and surveys; from school personnel, eg. attendance and enrollment data, discipline data and school activities that promote goals; and other data such as census data will be gathered by the project personnel through document review. Following development or identification of indicators and measures, it will be necessary to fully develop the logistics of the collection procedures. At this point in the project, the context, input and process variables influencing student outcomes have not been identified. Once more, it will be vital to have full involvement of teachers and parents in this process to build acceptance for the specific indicators. When these indicators are identified, it will then be possible to describe the analysis of the collected information essential to the interpretation process which follows.

Table 1

Examples Of Outcomes, Indicators, Measures, Comparators, And Grades

Outcomes	Indicators	Measures	Comparators	Grades
cognitive	achievement	CTBS Listening Skills	national norms, past district and school results	2
		language arts achievement test	provincial and district averages	3, 6 & 9
		speaking and listening tests	district results	4 & 7
		writing skills competency tests	district results	8 & 11
		English 30 and 33 diploma exams	provincial, district and past district averages	12
	student participation in regular, enriched and remedial programs	document review	district average	3, 6 & 9
affective	satisfaction	attitude survey	district and past survey results	3, 6, 9 & 12
	completion rate	document review	provincial averages	Jr. & Sr. High
behavioral	amount of leisure reading	library use survey	district average	3, 6, 9 & 12
	participation in related activities	student survey	district average	3, 6, 9 & 12
	image - educational partner attitudes	adult survey	past survey results	N/A
	post secondary participation	post secondary reports -document review	provincial average	Post. Sec.

The Interpretative Framework and Process: The interpretative framework, which is proposed, is designed to facilitate an understanding of student outcome indicators on the goals of student learning. In each jurisdiction and in each school the student outcomes will be reviewed in relation to the identified comparators as well as process, input and context variables to determine whether the outcomes are appropriate. In this evaluative process the variables will also be identified that are contributing to the outcomes.

An interpretative team, comprising representatives of all educational partners, will be formed for each goal of student learning in each school jurisdiction. After all of the teams have met to interpret the outcomes on specific goals, the steering committee in each jurisdiction will review the results of the individual interpretation teams to identify overall strengths, weaknesses and the process, input and context variables contributing to the outcomes. Following these two interpretation processes each school will interpret its student outcomes through a similar structure and process.

The process of interpretation will consist of five interrelated steps:

- completion of the tests and surveys by the interpretation teams members;
- establishment of acceptable and desirable levels of performance;
- determination of the relationship of the outcomes to the comparators and the interrelationship of the indicators for each goal;
- determination of the process, input and context variables contributing to the outcomes;
- identification of strategies to improve the outcomes.

The interpretation process for individual goals will commence with the team members actually doing each test and completing the survey. This activity, carried out prior to the team meeting, familiarizes the participants with the test or survey as well as the level of difficulty of the items. Next participants agree on both an acceptable and a desirable level of performance for both the item and its aggregate, the outcome. Having the interpreters establish these levels before they see the actual results not only deepens their understanding of the test or survey but it also reduces their tendency to rationalize rather than interpret the actual results.

As a baseline for discussion, the initial interpretative activity in this step will be to determine whether the outcomes are above or below the identified comparator. This will be followed by an examination of the interrelationship of the indicators for each goal to determine a tentative level of performance on the goal. For example, the interpretation of the student outcomes for English 30 could be as follows: The system results on the English 30 diploma exam were five percent above the provincial average and one percent above the past district average. These averages were identified as the comparators. While this result would appear to be very

positive, the related indicators would need to be examined. On further examination, it was found that the participation rate for English 30 was two percent above the provincial participation rate for this course. Furthermore, a review of the student survey results showed that the student attitude and satisfaction with English was very good, and student involvement in related activities (such as the student newspaper) was high.

At this point the interpretation team would be required to make an evaluative judgement about the student outcomes on a four-point scale. In this instance they would likely judge the outcome to be on the positive end of the scale. On the other hand, if the indicators were not uniformly positive, the evaluation of the outcomes at this stage could only be tentative until a full review of the process, input and context variables was completed in the next step.

Following the team review of the relationship of the student outcomes to the comparators and the interrelationship of the indicators, the team will determine the variables that are contributing to the positive results or identify the variables that are inhibiting more positive student outcomes. The team will begin by examining the variables most amenable to change, the instructional processes, to determine the processes that are contributing to positive outcomes and those that are not. In addition, parental activities that contribute to outcomes will be reviewed at this point. Next, input variables followed by context factors will be reviewed to determine the effect on student outcomes.

At the conclusion of this step, the interpretation team will be able to identify the process, input and context variables that are contributing to the student outcomes for the goal as well as those that are not. Furthermore, the team will be able to make a final assessment of student performance on the goal.

As an integral part of the review of process, input and context variables related to student outcomes, the team will identify areas requiring improvements. For example, it may be found that the primary mode of instruction in social studies is teacher - centered lecturing and, therefore, more extensive utilization of student - centered approaches such as cooperative learning and peer coaching would be recommended to improve student performance. These areas suggested for improvement would be further reviewed later as a part of the system's overall strategic planning process.

Following the interpretation of the outcomes for each goal, the system steering committee will review the results of the individual interpretation process to ensure consistency in interpretation from goal to goal and to identify common strengths, weaknesses and improvement strategies across the goals. The process employed by the steering committee will be a review of the results of the individual interpretation teams rather than a re-interpretation. The conclusions of the steering committee deliberations will be the substance of the public report on the system review.

The final interpretation activity will be the school level interpretation of student outcomes in relation to the system interpretations. A similar interpretation process will be used at school level as at the system level, that is , teams for each goal and an overall review team, both involving representatives of all educational partners. The purpose of this activity will be to identify individual school strengths, weaknesses and improvement strategies. This information will be reported to the school's parents and school community.

Future Developments, Observations and Comments

The primary activity during the first year of the project was to conceptualize and develop a full school system review process based on a quality indicator system. The intent was to develop a comprehensive process commencing with delineation of goals of student learning, identification and development of indicators, description of collection, analysis and interpretative procedures and development of a strategic plan to maintain strengths and improve on weaknesses. All developmental activities were to involve the steering committees in each jurisdiction as well as the educational partners directly for components where enhancing acceptance and ownership of the developments was vital.

Developments to be Completed

A number of components in the developmental phase still require completion. The measures for some student outcome indicators require further development unless existing valid and reliable instruments can be identified. As well, the context, input and process indicators have to be determined by direct consultation with parents and educators. Once these developments are completed the collection and analysis procedures for measures of all indicators can be finalized. Furthermore, the reporting procedures and the follow-up planning process need to be developed. All of these activities will occur prior to field testing and refinement of the instruments in year two.

Observations and Comments

Those involved with the project believe that the comprehensive school review process based on an indicator system has the potential for positively influencing student learning and public support for education. The fact that parents, educators, support personnel and trustees have been significantly involved in the developmental phase will enhance *acceptance* and *ownership* and increase the likelihood that teaching and learning, policy directions and parental and public support for education will change positively as a result of the review.

The components of the project, being consistent with the literature, further increase the likelihood of acceptance and success. Initiating the project on a sound basis of agreed-upon goals of learning, following with identification of clusters of outcome indicators for each goal, identifying the context, input and process variables, measuring the outcomes, interpreting the results and developing a strategic plan for improvement is seen as a fair and comprehensive process. In particular, it should be noted that educators have been very concerned that judgements about the performance of the educational system are often made on the basis of single indicators .This review process based on multiple indicators of the school system process will rectify that concern.

An additional advantage of the system review process is that it is "incorporated into a results chain that links all organizational effort" (Kaufman, 1988, p.80). In fact, the project is based on the fundamental purpose of school systems, student learning, it involves all partners in development and implementation, and it will result in a strategic plan for improvement. The components of that plan will be incorporated into the job responsibilities of personnel. This system, therefore, has the potential to influence the actions of parents, educators and trustees. That potential is enhanced because of the broad acceptance of the project.

Looking ahead: In further developing the project, care needs to be exercised to ensure that the indicator system is manageable from the educator's perspective. While it is essential to utilize a comprehensive set of indicators and measures, there needs to be caution to make certain that the number of indicators is not overwhelming. Staff has suggested that distribution of outcome measures throughout the grades will assist in making the review process more manageable. That is being addressed. Furthermore, while participation in the developmental process is important, it must not become a burden to those fully engaged in teaching.

Overall, there is strong support for the project in the school jurisdictions. The educational partners have appreciated the opportunity to mold the nature of the indicator system. They believe that once implemented, the system will provide two benefits: a comprehensive picture of each jurisdiction's performance, and provide the information necessary to the continual improvement of student learning.

References

Alberta Education (1990). *Educational Quality Indicators: Inventory of Assessment Instruments*. Edmonton: Planning and Policy Secretariat.

Buccino, Alphonse (1985). *Monitoring the Condition of Education*. Washington, D.C.: National Centre for Education Statistics.

Chandler, B. (1988). *Overview of Research on Effective Schooling*. Victoria: Greater Victoria School District (No.61).

Cook, Bill (1988). *Bill Cook's Strategic Planning for America's Schools*. Virginia, Arlington: The American Association of School Administrators.

David, Jane L. (1986). *Improving Education With Locally Developed Indicators*. New Brunswick, N.J., Rutgers University, Centre for Policy Research in Education.

Department of Education. Washington, D.C. (1985). *Indicators of Education Status and Trends*. Washington, D.C. : Department of Education.

Fraser, Barry J., Walberg, Herbert J., Welch, Wayne W. and Hattie, John A. (1987). Synthesis of Educational Productivity Research. *International Journal of Educational Research*, 147-252.

Goertz, Margaret E. (1989). *Developing a State Education Indicator System in Missourri*. Paper presented at the annual meeting of the American Education Research Association, San Francisco, C.A.

Haertel, Geneva D. and Katzenmeyer, Conrad G. (1989). *Capturing the Quality of Schools: Approaches to Evaluation*. Washington, D.C.: United States Department of Education. A paper presented at the meeting of the American Educational Research Association, San Francisco, C.A.

Hanson, Sandra L. and Ginsburg, Alan L. (1985). *Values and High School Success*. Washington, D.C.: United States Department of Education.

Heyneman, Stephen P. and Loxley, William A. (1983). The Effect of Primary School Quality on Academic Achievement Across Twenty-Nine High and Low Income Countries. *American Journal of Sociology*, Vol. 88.(6), 1162-94.

Kaufman, Roger (1988). Preparing Useful Performance Indicators. *Training and Development Journal*, Vol.7, 80-83.

McEwen, Nelly and Zatko, Gary (1989 June). *Educational Quality Indicators: Framework for Action*. Paper presented to the annual meeting of Canadian Educational Researchers' Association, Quebec City.

Mortimore, P. (1987). New Evidence on Effective Elementary Schools. The ILEA Junior School Project - A study of school effectiveness. *Forum*, 29, 47-50.

National Regional Educational Laboratory (1985). *Effective Schooling Practice: A Research Synthesis*. Portland, Oregon: Northwest Regional Lab.

Oakes, Jeannie (1986). *Educational Indicators: A Guide for Policy Makers*. New Brunswick, N.J., Rutgers University, Centre for Policy Research in Education.

Office of Educational Research and Improvement (1988). *Creating Responsible and Responsive Accountability Systems*. Washington, D.C.: Office of Educational Research and Improvement.

Overgaard, Robert M. (1988). *Report On Educational Outcomes*. West Vancouver, B.C.: West Vancouver School District.

Sweitzer, G.L. and Anderson, R.D. (1983). A Meta-Analysis of Research on Science Teacher Education Practices Associated with Inquiry Strategy. *Journal of Research on Science Teaching*, 20, 453-66.

Walberg, Herbert J. (1983). We Can Raise Standards. *Educational Leadership*, 4-6.

Wise, K.C. and Okey, J.R. (1983). A meta-analysis of the effects of various science teaching strategies on achievement. *Journal of Research in Science Teaching*, 20, 168-185.

Appendix
County of Lacombe and Rocky Mountain School Division Goals of Student Learning

Goal 1: Develop knowledge, skills, and positive attitudes in language and communication, mathematics, practical and fine arts, sciences, and social studies.

Goal 2: Develop different modes of inquiry and learning including:

- skills of finding, comprehending, organizing, analyzing, and applying information;
- skills of learning through technology;
- skill of studying.

Goal 3: Develop intellectual curiosity and a desire for independent life-long learning.

Goal 4: Develop a sense of community responsibility which embraces:

- an understanding of and appropriate participation in citizenship at the local, national, and international levels;
- respect for law and authority, public and private property, and the opinions and rights of others;
- appreciation of the importance of traditional and culture.

Goal 5: Develop a commitment to the careful use of natural resources and to the preservation of the physical environment.

Goal 6: Acquire knowledge and develop skills which contribute to physical well-being.

Goal 7: Acquire knowledge, develop skills, attitudes, and habits that contribute to emotional well-being including:

- achieving a positive self-concept;
- acquiring a high level of self-discipline and individual responsibility;
- acquiring an ability to respond to change;
- developing short and long-term personal goals.

Goal 8: Acquire knowledge and skills, attitudes, and habits for individuals to be successful and respond to the opportunities and expectations of the world.

Overall Goal: Achieve successful graduation from senior high school.

Measuring Social Competence in Students

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Paper presented as part of the symposium, "Educational Quality Indicators: Collaboration in Action", at the annual meeting of the Canadian Educational Researchers' Association, Victoria, June 5, 1990.

Measuring Social Competence in Students

The purpose of this paper is to outline a conceptualization of social competence and a methodology for measuring social competence. Some discussion will be provided of difficulties in accomplishing the conceptualization and methodology, as well as a discussion of future stages in the application of the conception and methodology to one school jurisdiction.

Introduction

Background

Fort McMurray Public School District #2833 is made up of 13 schools - ten elementary/junior schools, two high schools and one special programs school. All are located within the city. The District's fundamental purposes are to ensure that all 4,700 students achieve levels of knowledge and skill consistent with their varying abilities; that they perform at levels equal to or greater than established norms; that they develop positive attitudes towards learning and toward themselves and others; and that they develop into productive citizens.

The District has been involved in the development of Student Performance Indicators and Standards since 1982. The first Annual System Student Evaluation Report (1986-1987) was presented to Trustees by administration in October 1987. The report drew together a variety of information representing the educational health of students in the system: academic, behavioral/emotional/attitudinal, physical, and cultural. Some of the systems to identify and collect the information took almost four years to put into place. The first report represented a major effort to provide "measurable" evidence to the Trustees and the public of the health of the District's educational efforts.

Although the defined outcomes and standards of the District's "indicator system" represented a solid basis for future development towards being increasingly accountable to the ratepayer for educational benefits, some indicators and their standards were quickly identified as needing revision and refinement. The indicators and standards requiring most revision were in the area of social skills, behaviors and attitudes. In particular, there was deemed to be a need to shift from "negative" indicators to more "positive" or desirable indicators. This study was designed to address this need for revision.

Rationale

First of all, schools appear to be becoming more accountable for knowledge, skill and attitudes outcomes related to a variety of topical social areas, such as smoking, environment, A.I.D.S., suicide prevention and so forth. More broadly conceived, schools appear to be becoming increasingly responsible for development of socially competent young people. Thus there is a practical need to understand what constitutes a socially competent individual, how to assess the competencies, and how to report on the selected competencies. Additionally, all of this needs to be done in ways which are valid and reliable, yet feasible in an operational sense.

Secondly, there is a need for further research into the general construct of social competence and its assessment. The existing theories concerning social competence and skills appear to lack cohesiveness and consistency.

Purpose of the Study

The purpose of the study was to develop a set of social skills, behaviors and attitude indicators and standards which would then be used to assess the quality of a selected portion of one school jurisdiction's educational program and delivery.

To fulfill the study purpose, it is necessary to complete the following tasks:

1. to identify or develop a set of desirable student social skills;
2. to identify or develop measurable outcomes and standards for the desirable student social skills;
3. to establish a methodology for collecting, analyzing and interpreting the data;
4. to identify or develop strategies for teaching the identified desirable student social skills;
5. to identify or develop a means for reporting information and findings to users.

Social Competence

Systems Conceptualization

A systems perspective of social competence based on a modified CIPP model (Worthen and Sanders, 1987, p.78) was used as the conceptual framework to discuss the concepts in this study, and their interrelationships as conceived and schematically presented in Figure 1.1.

Worthen and Sanders (1987) note that:

> Until we have solid information about the relative effectiveness of the numerous evaluation approaches, choices among alternatives will remain a matter of the evaluator's preference....(since) there is almost no research to guide one's choice. (pp. 148-149)

They further state that:

> .....adherence to any one model rather than another is largely a statement of philosophy or a profession of faith.

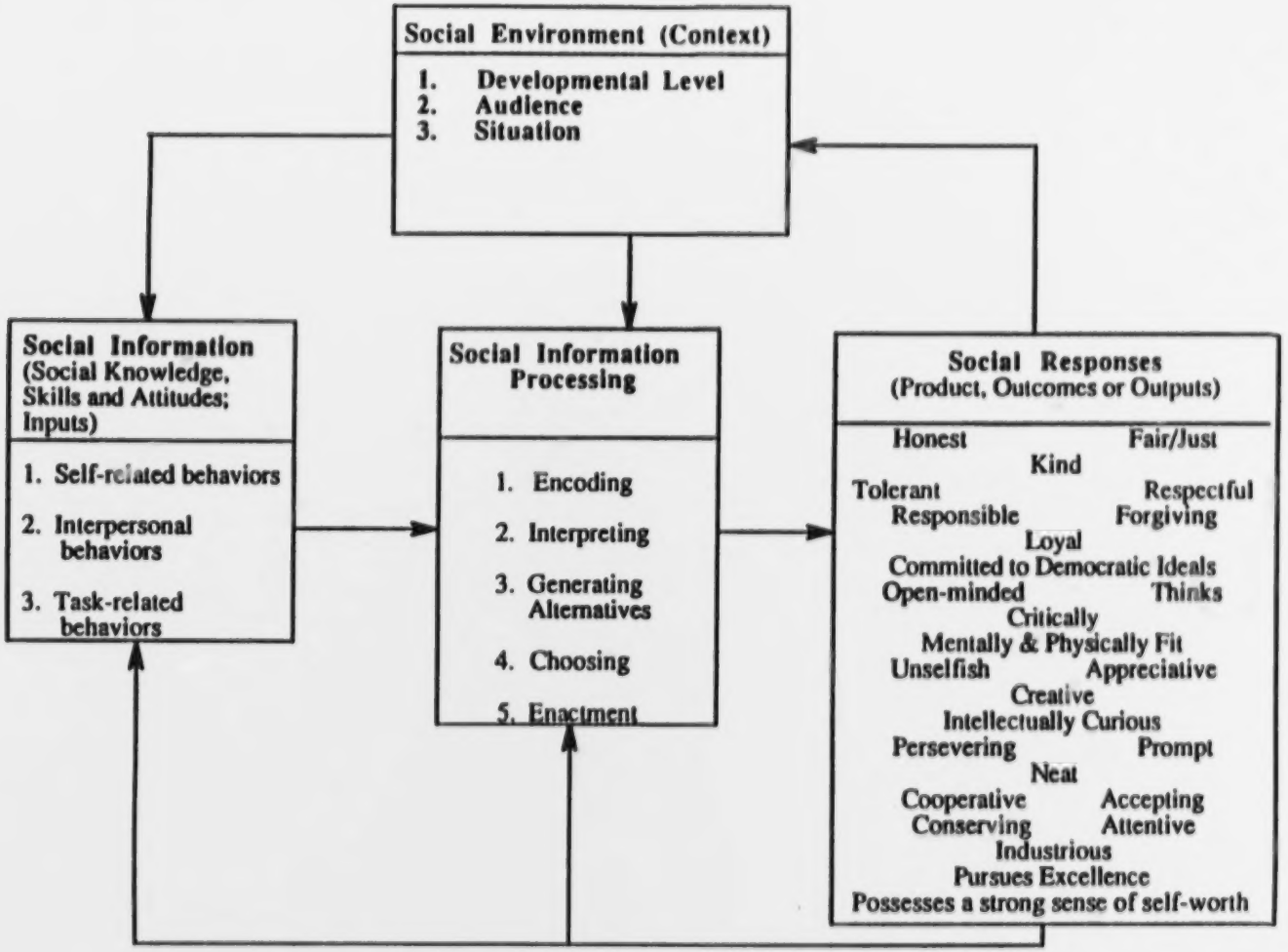

Figure 1. Systems Model of Competent Social Response

Since no universally accepted approach to the conceptualization and evaluation of social competence appears to exist, and since no universally accepted approach to evaluation appears to exist, a decision was made to use a systems perspective as the basic organizing framework for the conceptualization. The systems perspective was compatible with the beliefs of the study team and appeared to provide good information for program development and student evaluation related to social competence. The concepts which were pertinent to this study included social knowledge, skills and attitudes; social information processing; social responses or social outcomes; and social context.

Conceptualization of the Construct.

The review of the literature concerning the nature of social skills and social competence quickly identified certain common threads which were pertinent to the conceptualization that evolved.

1. There are specifiable elements/skills.

2. There is a need for the elements/skills to be processed in an appropriate manner; the processes may be either cognitive or affective.

3. The appropriateness of behaviors to specific situations is crucial.

4. There is no agreed-upon generic social skills listing. Also, any list needs to be flexible to some extent to the needs of the user.

5. Appropriate social responses are affected by the developmental level of the respondent, and the audience for the respondent.

6. Social responsibility can be learned.

7. The whole social competence construct is dynamic, synergistic, and organic.

8. Specific social elements and skills are comprised of specific and discrete verbal and non-verbal behaviors and entail both effective and appropriate initiations and responses.

9. The skills are interactive by nature.

10. Deficits and excesses in social response can be specified and targetted for intervention.

11. Instructors attempting to teach social skills or appropriate social responses should adhere to the "relevance of behavior rule" (Allyon and Azrin, 1968) which states that instructors should teach only those behaviors that will continue to be naturally reinforced after training. Adopting this viewpoint assists in ensuring that social skills selected for instruction will have some intrinsic value to the child, some benefits for the child, and be valued by others who would likely reward their occurrence.

Social Environment (Context): The construct of social environment evolved to include developmental level, audience, and situation. The "developmental level" came to include concepts of age, language development, physical development, and academic competency. For practical purposes, they were defined as Divisions I, II, III and IV, as they relate to school systems. "Situation" was further defined in an effort to simplify the construct and yet provide some forms of recognition and consistency to it without making it totally unmanageable. Situations were identified as old/new, familiar/unfamiliar, and friendly/hostile. "Audience" came to be defined as those individuals receiving the responses. The audiences might include peers, teachers, parents or 'significant others'. 'Significant others' could include older or younger children, or significant other adults.

Social Information (Knowledge, Skills and Attitudes): The construct of social information that evolved relied heavily on Reschly and Gresham (1981) who identified social competence as being composed of two components: adaptive behavior and social skills. The social skills were further identified as breaking into three categories: interpersonal behaviors, self-related behaviors and task-related behaviors. Examples of interpersonal behaviors included accepting authority, conversation skills, cooperative behaviors and peer relationships. Self-related behaviors involved expressing feelings, ethical behavior, and positive attitude to self. Examples of task-related behaviors included attending behavior, completing tasks and following directions.

Social Information Processing: While it was recognized that there were a series of identifiable skills, these in turn required some form of processing and are related to what Reschley and Gresham (1981) refer to as 'adaptive behavior'. These adaptive behaviors include independent functioning skills, physical development, language development and academic competencies. These, in turn, were all recognized as operating within some form of context, and that context was defined as the developmental level of the respondent as well as the audience which the respondent was referencing, and the specific situation. Therefore a model of social competence evolved which included a series of social skill components, adaptive behavior processes and contextual variables. This model was reviewed by individuals from Alberta Education and suggestions were made regarding potential revisions. The adaptive processes which had been identified as academic competencies, language development, physical development and independent functioning skills, were cross-referenced to other aspects of the model. Language development and physical development were viewed as sub-sets of the contextual variable of developmental level. Academic competency, while obviously having a relationship to social skill development, was not deemed to be a crucial focus for the purposes of this study, although there is a recognition that there is a correlation. That left one key adaptive behavior process identified as "independent functioning skills". In an attempt to refine the concept of independent functioning skills, a further review of the literature was undertaken to identify and clarify what independent functioning skills might entail.

A selective review of literature concerning cognition, decision-making and problem-solving was undertaken. In the process, an application by Perry and Perry (1987) of Dodge's Social Information Processing Model of Social Competence was found. The model describes cognitive steps thought necessary to children's appropriate and competent action in social situations, namely:

1. Encoding social cues.
2. Interpreting behavior.
3. Generating alternative responses.
4. Choosing a response after evaluating potential consequences of alternatives.
5. Performing the chosen response.

A futher description by Perry and Perry (1987) notes that *encoding* of social cues involves searching for relevant social information before responding. *Interpretation*, involves giving meaning to the cues intended. The *response search*, generates various possible behavioral responses to the situation at hand, and these responses can vary in quantity as well as quality. The *response decision* involves choosing a response after evaluating the potential consequences of each possible response. And the final step is *enactment* where there is a behavioral performance of the chosen response, and children obviously cannot perform successfully the response they have selected as best unless they possess the motor and self-regulatory capacities to carry it out. This conceptualization was deemed to more completely define the concept of the "processing" of the social knowledge, skills and attitudes which were deemed pertinent to the study.

Social Responses: Definition of social response areas is difficult since they need to be acceptable as norms of social behavior that are widely accepted across and within different groups in society. Therefore, it was decided to adopt the social outcomes or norms identified as desirable within Alberta and specified by the province in the School Act and in the Guide to Education.

The 1988 Alberta *School Act* specifies a code of conduct:

> A student shall conduct himself so as to reasonably comply with the following code of conduct:
>
> a. be diligent in pursuing his studies;
> b. attend school regularly and punctually;
> c. cooperate fully with everyone authorized by the Board to provide education programs and other services;
> d. comply with the rules of the school;
> e. account to his teachers for his conduct;
> f. respect the rights of others. (p.11).

Additionally, some desirable personal characteristics, outlined by Alberta Education in *A Guide to Education* (1989), are categorized into three areas:

a. ethical/moral characteristics;
b. intellectual characteristics; and
c. social/personal characteristics.

The ethical/moral characteristics included respectful, responsible, fair/just, tolerant, honest, kind, forgiving, committed to democratic ideals and loyal. The intellectual characteristics included open-minded, thinks critically, intellectually curious, creative, pursues excellence and appreciative. The social/personal characteristics included cooperative, accepting, conserving, industrious, possesses a strong sense of self-worth, persevering, prompt, neat, attentive, unselfish, and mentally and physically fit.

Additionally, John Raven, (1982), indicates that:

> ....the vast majority of teachers, pupils and parents want schools to foster such qualities as the willingness and the ability to take the initiative in introducing change into their society, independence, the ability to make their own observations and learn without instruction, the ability to apply facts and techniques to new problems, to develop their characteristics and personality, and to ensure that they leave school intent on being master of their destinies. (p.342).

Raven states that these opinions are "correct", as indicated in a variety of research efforts between 1961 and 1979, which identifies these factors as the most important qualities for our pupils to develop in relation to their futures at work and in society. He further notes, however, that despite this agreement about what *should* be done, most secondary school teachers neglect these wider goals and concentrate on achieving academic goals which probably represent only a sub-set of what the majority of people wish to have happening in schools.

Summary of the Construct: For socially appropriate responses, or competent social response, students will be required to process social knowledge, skills and attitudes and respond in ways that are appropriate to a particular social environment. When students are perceived and received positively by the respondent, then they will be viewed as socially competent.

Research Design and Methodology

The process of assessment of social competence appears to be highly complex. In summary, the review of the literature notes that:

1. No single assessment methodology is sufficient. There appears to be a need for multiple methods of assessment. Michelson et al. (1983) refer to this as a comprehensive assessment strategy, and Schwartz and Kaplan (1981) would refer to it as triangulation.

2. There are major issues of reliability, validity and practicality in social competence assessment. The validity issues focus on whether or not the child has only a knowledge of a specific behavior, or can also perform the behavior under appropriate circumstances. Reliability relates to whether or not the various 'raters' of social behavior are consistent with one another (for example, adults to children, researcher to parent, parent to teacher, and so forth). The issue of practicality notes that the assessment strategy must have adequate time, trained personnel, resource materials, and administrative capabilities in analysis. If these factors do not exist, technical problems, inaccurate or incomplete data sets, and overall reduction in quality of the evaluation may occur.

On the other hand, procedures which are too time consuming, and which fail to produce useable information will result in failure of staff to implement the strategy. From the point of view of operationalizing the comprehensive assessment strategy in a school context, the issue of practicality is fundamental to the effective implementation of the total process.

3. No single informant can provide a valid and reliable perspective. Therefore, there needs to be assessment input from multiple sources.

4. The purposes of the assessment need to be clearly defined as either diagnostic,intervention, or both.

5. The most conventional practical assessment approaches may be forms of self-reports and behavior checklists. Self-reports tap into the child's knowledge of social skills and provides information related to their cognitive and affective understanding of social skills. However, they may not provide an accurate assessment of the child's everyday performance of social skills. Behavioral checklists by knowledgeable adults can provide information related to the actual and observable social behaviors.

6. A potentially useful, but less conventional method includes peer assessment, although this methodology is cumbersome, relatively new to behavior assessment, and may have questionable reliability with young children. Nevertheless, it does collect data from the most important member of the child's social environment and will reflect an assessment of actual social behavior as perceived by peers.

7. Peers, teachers and parents constitute the users of the student's social competence and, therefore, are important data sources regarding the student's social competence.

In conclusion, no single approach emerges as the best method for social skills assessment in all social contexts. Therefore there is a need for the development of a comprehensive assessment strategy which will be valid, reliable and practical; based on multiple information sources and multiple assessment methods; suitable to a variety of developmental levels, audiences and situations; and focus on the identification of social skills, processes and outcomes.

The major methodological techniques employed in educational measurement include questionnaires, interviews, observations and document analysis. In an effort to ensure a "comprehensive assessment approach", an attempt is being made to use all methods in some fashion.

The methods have been cross-referenced to potential respondents as outlined in Figure 2. Figure 2 was then extended to determine which of the method/respondents were most applicable to the various sub-systems of the Model of Competent Social Response (Figure 1). The results are presented in Figure 3.

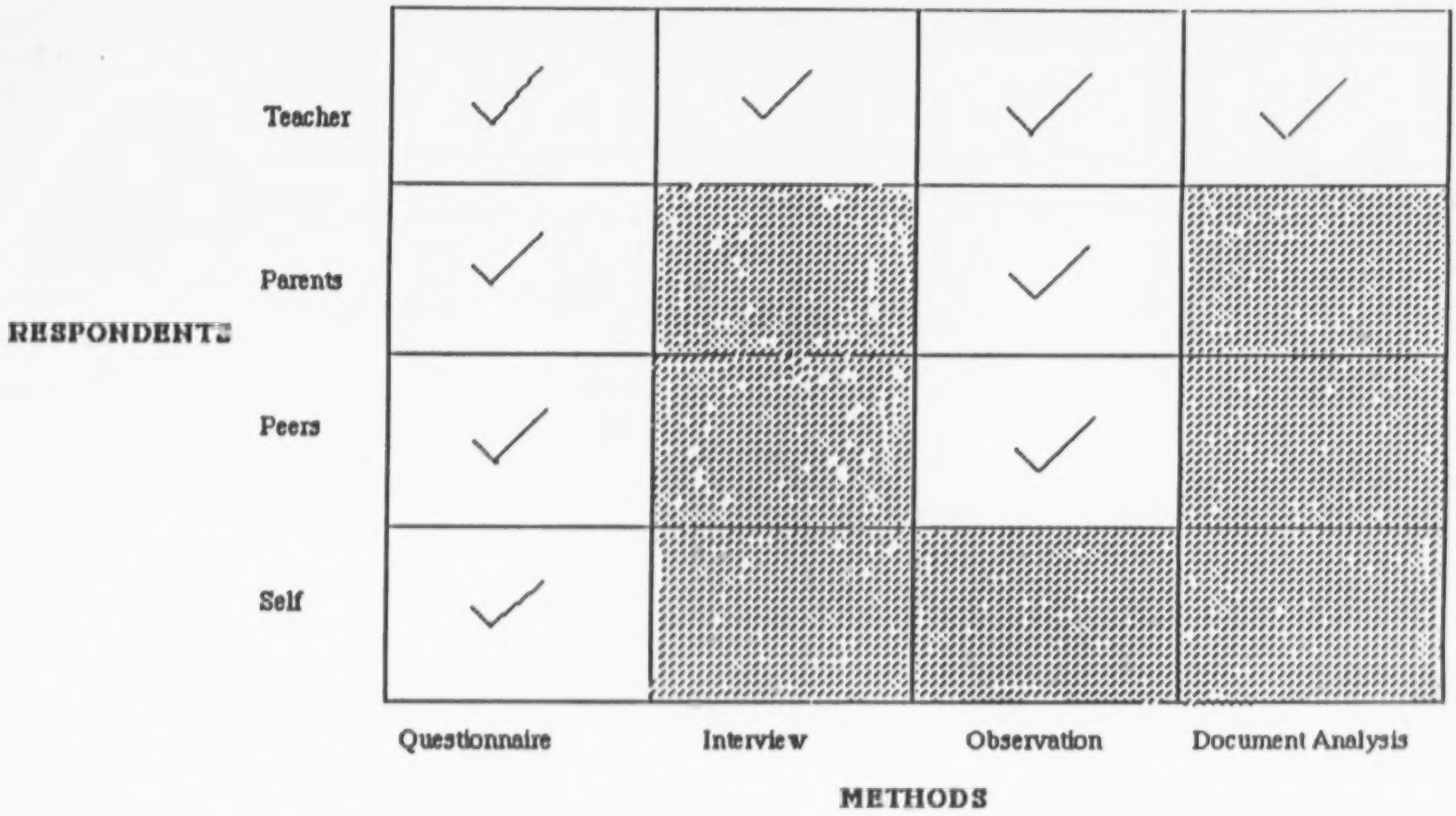

Figure 2. An Assessment Method/Respondent Matrix

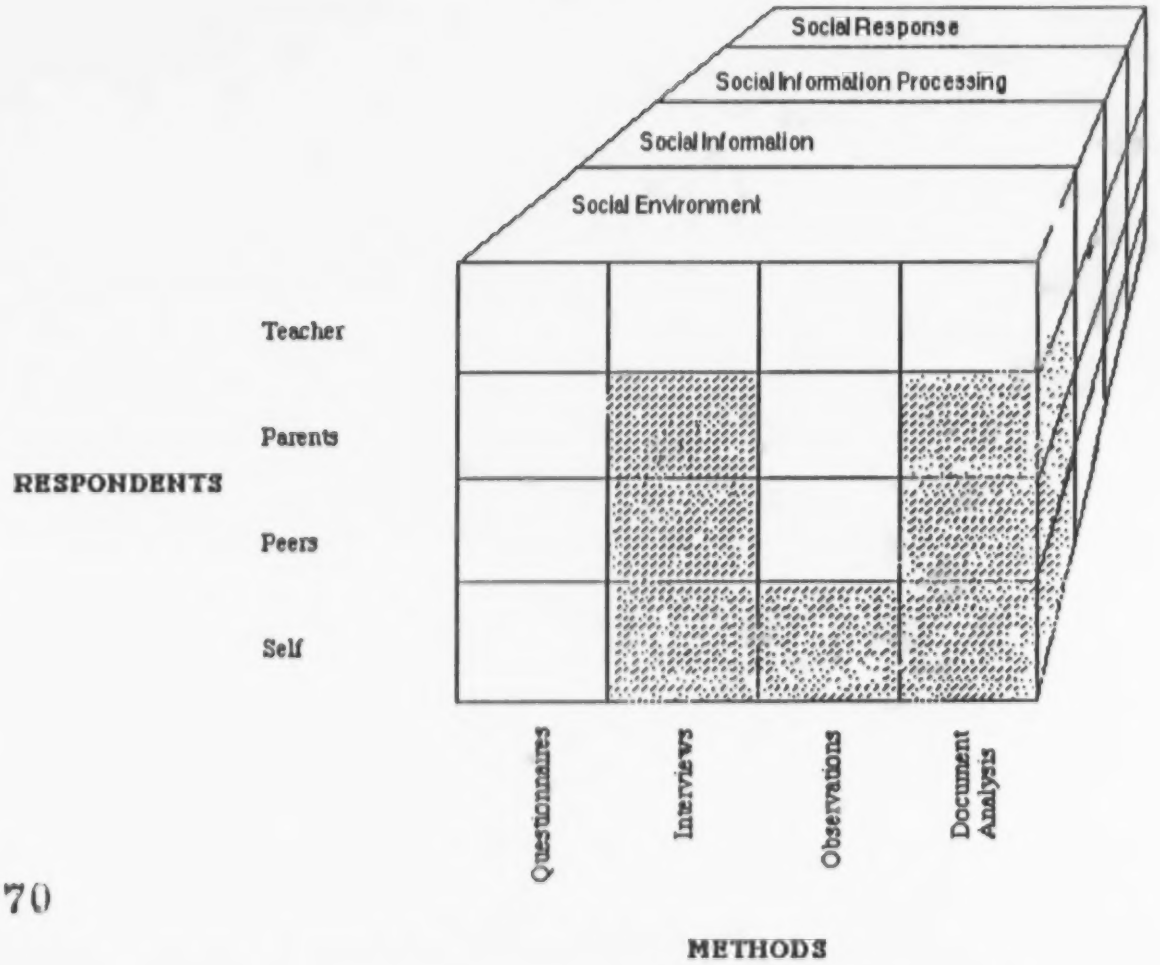

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Figure 3. Comprehensive Assessment Strategy or Analysis of Suitable Assessment Method/Respondent Approaches for Sub-systems of the Competent Social Response System Model

Discussion

Social Competence

The study team consists of two teachers, two administrators, two counsellors, a Supervisor of Student Services and a senior administrator. The study team initially attempted to come up with a simple listing of desirable social skills and realised that the range of skills was substantial. Secondly, the team quickly realised that, in terms of selecting the requisite or desired skills, a number of other factors came into play such as the situations in which skills needed to be used, how the skills were processed, and so forth. At this point, the team decided that a conceptualization of social competence was necessary prior to being able to identify contributing skills and identifying desired outcomes.

The study team, from a job point-of-view, had varying backgrounds. Additionally, training was varied, and included administration, curriculum, and education psychology. Attempts to conceptualize the area of social competence resulted in a variety of schematic approaches ranging from matrices to cubes to concentric circles. In each instance, the individuals proposing their conceptual frameworks could not understand why other individuals on the team were having difficulty accepting the conception. Eventually it was realised that each team member, from the point-of-view of their personal styles of learning and training, had a conceptually different approach to educational issues including the one of social competence. The systems framework which came to be used was the one model which all study team members could accept.

At this point, the conceptualization became broken into segments. There was a consistent acceptance of the skills area, or what has come to be known as the social information sub-system, as being composed of self-related issues, interpersonal-related issues and task-related issues. How the information was to be processed lacked agreement until the Dodge conception of social information processing was identified. Thirdly, there was a general acceptance that the definition by *the School Act* and *the Guide to Education* of socially desirable outcomes would be suitable for our needs. Lastly, team members agreed that all of these factors operated in some context that eventually came to be defined as developmental level, situation and audience.

The second major difficulty in terms of conceptualizing social competence had to do with framing the situational variable. There is no practical method for accommodating all of the various situations in which students must operate, and yet the situation has a great deal to do with how children are defined in terms of their social competence. Therefore, a fairly simplistic definition of the situational variable as old or new, hostile or friendly, came to be accepted as a step towards practical definition for purposes of instrument development.

In summary, the construct of social competence was approached by a variety of individuals with a variety of backgrounds who came to realise that the area of study was much larger and much more complex than they had originally envisioned.

Secondly, attempting to understand the concept and to define it came to be a very time-consuming and difficult task. However, through the process of grappling with the construct, the team has basically educated itself as to the various components and relationships, and has provided for themselves a solid foundation for the remaining developmental work concerning the construct. The next stages for construct development will be:

1. an identification of specific knowledge, skill and attitude aspects of the social information sub-system.
2. refinement of the social response outcomes.

Methodology

There was an early realization by the study team that measurement of social competence is extremely difficult and complex. The measurement would require multiple methodologies and multiple respondents, and that the methodologies and respondents would have to relate to the various sub-systems of the conceptual framework. These features would be compounded by the need for any methodologies to be valid, reliable, and practical. The study team initially considered the development of its own instruments. However it was recognised that instrument development, to make it valid and reliable, is an exceptionally time-consuming task which was either beyond the capability or the desires of the working group. As a result the committee decided to re-examine, on an item-by-item basis, all the various assessment instruments which had been identified, and which fit certain criteria.

1. The instruments would focus on students in regular classrooms.

2. There would be a variety of developmental levels, largely defined as Divisions I, II, III and IV.

3. Preferably, there would be a variety of sub-scales and items which addressed the social response areas identified, and would have the potential for revision to meet the requirements of the team's particular needs.

4. The instrument would focus on positive social behavior, as opposed to negative social behavior, or lack of social behavior.

5. Any instruments would also have, hopefully, instrument variations pertinent to the various audiences who might be responding such as parents, teachers and students.

The search for instruments has been undertaken but is not completed at this time. Two instruments which appear to have some strong possibilities are the *Self-Perception Profile for Children* (1985) and the *Self-Perception Profile for Adolescents* (1988) which were developed by Susan Harter. These scales appear to fit the noted selection criteria. Additionally, in conversation with the author, it has been determined that new sub-scales can be developed or that some of the existing sub-scales can be dropped. In other words, the profile is open to developmental work to match more closely the conception for the study. Lastly, the scale has norms established for Alberta, and those norms will shortly be reported as part of another project of Alberta Education.

A second instrument is being considered at the moment. The instrument is the *Teacher Rating of Social Skills for Children (TROSS-C)* developed by Clarke, Gresham and Elliott (1985). The *TROSS-C* is a checklist format and would be suitable, therefore, for observations concerning actual behavior. The Harter scales relate more to student perception of behavior.

Thirdly, a decision has been made to review some nomination scales which were identified in the original literature review. The nomination scales will be used with peers in terms of peer assessment of social competence. Therefore, at this stage of the study there is serious consideration being given to questionnaire, checklist and nomination scales, in terms of a selection of established instruments.

Additionally, interview schedules for use by either the teacher and/or counsellors are being considered. Lastly, a document review process will be considered as part of the assessment strategy. The documents that could be reviewed would include disciplinary reports or anecdotal teacher records, such as a log or journal, which would be available in a semistructured format. Needless to say, the bulk of our work over the next few months will focus on some refinements of the conceptual element for both the overall construct and for methodology.

Once the team has identified instruments which appear to have substance, and utility, it will be attempting to combine the various assessment methodologies and respondents pertinent to the various sub-systems, and to develop an integrative mechanism for analyzing the data such that teachers will be able to eventually report to parents concerning the social competence of their children as it relates to the social competence objectives of the school system. Such a reporting mechanism , while still needing to be defined, would most likely be represented on some form of report card. The major premise behind this form of reporting is that, if we can sufficiently define the social objectives of a school jurisdiction, and if those social objectives are consistent with the objectives of society, and if schools have a responsibility for developing these objectives and outcomes in students, then as a school jurisdiction we should have identifiable means of being able to demonstrate to society, to parents, and to children, that we have accomplished the task that has been defined for us by the larger community. Obviously it remains to be seen as to whether or not we can do this in a fashion that is acceptable to that larger society, and to parents, and to do so in a fashion that is relatively straightforward and practical from the point-of-view of the profession.

References

Alberta Education. (1989). *Guide to Education: Junior High School Handbook.* Edmonton: Alberta Education.

Allyon, T., & Azrin, N. (1968). *The Token Economy.* New York: Appleton-Century-Crofts.

Clarke, L., Gresham, F.M., & Elliott, S.N. (1985). Development and validation of a social skills assessment measure: The TROSS-C. *Journal of Psychoeducational Assessment,* 4, 347-356.

Harter, S. (1985). *Self Perception Profile for Children.* Denver: University of Denver.

Harter, S. (1988). *Self Perception Profile for Adolescents.* Denver: University of Denver.

Michelson, L., Sugai, D.P., Wood, R.P., & Kazdin, A.E. (1983). *Social Skill Assessment and Training with Children.* New York: Planum Press.

Perry, D.G., & Perry, L.C. (1987, July). *Applications of Dodge's social information processing model of social competence to the study of prosocial behavior in children.* Paper presented at the Biennial meeting of the International Society for the Study of Behavioral Development, Tokyo, Japan.

Province of Alberta. (1988). *School Act.* Edmonton: Queen's Printer.

Raven, J. (1982). Broadening the base for educational assessment: some reasons, some problems, and some suggestions. *Bulletin of the British Psychological Society,* 35, 342-344.

Reschly, D.L., & Gresham, F.M. (1981). *Use of Social Competence Measures to Facilitate Parent and Teacher Involvement and Non-Biased Assessment.* Iowa: Iowa State University.

Schwartz, T.A., & Kaplan, M.H. (1981, April). *Operationalizing Triangulation in Naturalistic Evaluation: Community Education in Kanawha County.* Paper presented at the annual meeting of the American Educational Research Association, Los Angeles.

Worthen, B.R., and Sanders, J.R. (1987). *Educational Evaluation: Alternative Approaches and Practical Guidelines.* New York: Longman

Signs of Learning in the Affective Domain

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Paper presented as part of the symposium, "Educational Quality Indicators: Collaboration in Action", at the annual meeting of the Canadian Educational Researchers' Association, Victoria, June 5, 1990.

Signs of Learning in the Affective Domain

"The Alberta community lives with a conviction that man is unique and is uniquely related to his world. Generally, but not universally, this expresses itself spiritually, through the belief in a Supreme Being (e.g. God)" (Alberta Education, 1990, p.8).

The Lethbridge Catholic School District operates with the conviction that providing excellent academic education be done "... in an environment of love, self-respect and respect for others."

This research project is responding to convictions such as "...affective education is a necessary condition for effective education" (Beane, 1986, p.27).

In spite of these convictions, the importance of affective education is not reflected in the educational reporting system with anything like the same intensity. Indicators of affective quality are not systematically recorded or reported as indicators of success or achievement.

This paper outlines the importance of the affective domain as stated in Alberta Education documents. It describes the efforts of the Lethbridge project to identify attitudes, observe actions, record behaviors and determine growth in order to reflect the importance of affective learning in the reporting system.

A brief background of the Lethbridge Catholic system shows its concern not only with intellectual growth and skill mastery, but also with spiritual, moral and emotional growth. The project fits well with the *Prayer of St. Francis.*

Lord, make me an instrument of Your Peace
Where there is hatred, let me sow love;
Where there is injury, pardon;
Where there is doubt, faith;
Where there is despair, hope;
Where there is darkness, light;
Where there is sadness, joy;

Some of the literature which served as a basis for the project is cited. The rationale and procedures followed by the Lethbridge project are described. The behaviors which are proposed as indicators of affective growth are divided into positive responses that persons could make to life, to self, to others, to the world and to learning. Since the project is still developing the theoretical framework and identifying behaviors to be used as indicators, the observations are limited and the implications are posed as questions.

Introduction

It is clear from the literature and the documents of Alberta Education and the Lethbridge Catholic School District that the affective domain is important. This project seeks ways of enabling teachers to express this importance in the reporting system.

Purposes

The School Handbooks for Elementary, Junior High and Senior High Schools in

Alberta (Alberta Education, 1990) set out six specific goals of schooling. In addition to the competencies, skills and knowledge goals, the Handbooks also list as goals:

- attitudes in mathematics, the practical and fine arts, the sciences and the social studies.
- attitudes and habits which contribute to physical, mental and social well-being.
- an understanding of the meaning, responsibilities, and benefits of active citizenship.
- attitudes and habits required to respond to the opportunities and expectations of the world of work.

One purpose of this project is to find indicators which will identify these attitudes.

The School Handbooks also list the broader goals of education which are to be shared by other agencies within the community, especially the family. These goals state that the school will strive to:

- develop a sense of responsibility.
- develop a positive self-image.
- develop an appreciation for..., a sense of purpose in..., an interest in..., a commitment to..., etc.

These broader goals are to be shared with other agencies in society, however, "...the actions of teachers and the activities that take place in schools contribute in a major way to the formation of attitudes." (Alberta Education, 1990, p.8) This puts a large portion of the responsibility for these affective goals on the schools. The formation of attitudes is an important ingredient in the success of education. A second purpose of this project is to assist the schools in their contribution to the formation of positive attitudes by devising a system for monitoring and recording behaviors which are indicators of attitudes.

The Handbooks for Alberta schools state that "...parents and other groups in society clearly expect teachers to encourage the growth of positive attitudes in students." (Alberta Education, 1990, p.8) A third purpose of this project is to devise a system for teachers to determine if growth in the affective domain has taken place and if their efforts at encouraging positive attitudes have been successful.

The Handbooks also state that these attitudes are the prerequisites to the development of essential personal characteristics, of which 26 are listed. This project aims to identify ways in which the development of desirable personal characteristics can be recorded through the use of observable actions and products.

Background

For the past 100 years, the Catholic School system and the Public School system have shared in the active and vigorous task of education in Lethbridge. The Catholic System has 1 High School, 1 Junior High School and 6 Elementary schools with a total of 152 teachers and 55 support staff to serve their 2700 students. The Catholic schools integrate all students and are committed to the full development of each student in their care. People in the schools like to think of the schools as places of hope.

The Lethbridge Catholic School District has a history of concern for the affective domain. Their Policy of Affirmation of Students and Staff advocates that all members of the School District acknowledge the need for affirmation and practice affirmation at all times. "Affirmation aims to prevent a person's failures and fail-

ings from destroying him." (Appendix A) Their aim is the development of a wholesome and authentic self image for each student.

Programs in the Lethbridge Catholic School District are evaluated to determine whether they provide an opportunity for students to develop "a maturing Christian response as their schooling proceeds." (Appendix B) These responses are in the affective domain, in values, attitudes and predispositions.

The evaluation of student progress in the Lethbridge Catholic School District is a celebration of learning which provides "...a sense of hope and success." (Appendix C) The teacher develops a trust relationship with the students and evaluates them "...objectively, consistently, fairly and justly with the goal of instilling hope in the students and affirming their God-given talents." (Appendix C) The teacher has the responsibility to make recommendations which will assist the student's self-actualization. When Maslow popularized 'self-actualization' in the 1950's he showed how it was closely related to self-concept, and how it affected behavior. The evaluation of student progress in the Lethbridge Catholic system has been designed to encourage the growth of self-image, to assist in self-actualization, and to affect behavior.

To assist in this process of affective growth, Principals in the Lethbridge Catholic School District are commissioned to work with parents and teachers to recognize the talents of all children and to promote their development. Principals assist their students "...to see themselves in relation to the Gospel message of love, and to develop a healthy self-concept." (Appendix D)

These policies are the basis for the Mission Statement which declares that: "We strive to instill a responsible attitude toward the world and its people."

It is from this background that the Lethbridge Catholic School District has come to the decision to research signs of learning in the affective domain.

Related Literature

In 1964, Bloom, Krathwohl and Masia noted the lack of a systematic effort to collect evidence of growth in affective objectives. They suggested that the intent to measure affective growth often deteriorates into grading what can explicitly be evaluated, or measuring only dramatic or negative developments. They argued that attitudes develop slowly and cause problems for teachers who need results recorded for each reporting period. They also queried the use of general terms such as '...develops an interest in reading...' The scope 'of interest' could range from recognizing that someone is reading to a passionate devotion toward reading.

In 1971, Bloom, Hastings and Madaus stated that progress tests and achievement examinations which inform students of their mastery of a subject, tend to build students' confidence and belief in their own competence. This affects the students' level of interest and motivation to learn more. They show that cognitive outcomes and affective outcomes are closely related. However, they prefer formative evaluation and feedback to students on their progress toward affective goals over summative grading of affective behavior.

Bloom, Madaus and Hastings (1981) urged teachers to write clear affective as well as cognitive objectives. The use of observable actions or products as objectives makes it possible to evaluate the achievement of those objectives. Teachers were advised to ensure congruence between the stated and the evaluated objectives. They were also to ensure that the affective objectives were desirable ones in relation to

the philosophy of the school and the needs of the students.

Rubin (1973) claimed that the curriculum includes affective learning whether or not we wish it. He stated that often high achievement comes at the cost of permanent insecurity, anxiety and a defective self-concept. He suggested that if teachers deal with the affect, students' emotional well being improves and so does their efficiency of learning. He proposed a balanced curriculum which integrates knowledge, feelings and behavior.

Rubin (1974) said that our attitudes make us what we are. Our beliefs or perceptions shape our attitudes or predisposition to behave in one way. Our perceptions, attitudes, beliefs and choices are the cornerstones of affective education. Affective education is about the learner's attitude toward self, toward life, toward school and toward purpose.

Rubin (1982) stated that cognition is a powerful force in the shaping of attitudes, which in turn determine emotional responses. He said that the goal of affective education is to bring cognitive judgment on antecedent conditions and consequent behaviors. He believed that the best teachers are concerned with both the student and the subject; and that they excel at instructional procedures in both the cognitive and the affective domain.

Beane (1983), Beane (1986) and Beane and Lipka (1984) said that self perceptions influence school achievement but school achievement influences the perception of self. He contends that grading systems which accentuate the positive, give feedback of acceptance from significant others, and enhance the self as learner are superior to competitive grading systems which he alleges are antithetical to personal development and an obstacle to social cooperation.

Glickman (1987) asked if it was good or effective schools we wanted. He noted how the unrehearsed responses to that question were predominately affective and differed from the formal responses of numerical data.

The intention of this research is to find what those unrehearsed responses are in regard to expectations of a quality education in Lethbridge. The literature cited, as well as a broad range of other literature, serves as a basis for this research project.

Description of the Lethbridge Project

Rationale

The Goals of Secondary Education and the Goals of Elementary Education as listed in the Handbooks of Alberta Education (1990) aim to assist students in developing positive attitudes.

The Policies of the Lethbridge Catholic School District instruct the schools to instill responsible attitudes.

The desire of the schools to report on affective outcomes is reflected in their reporting systems. The Elementary Schools use anecdotal reporting where affective outcomes are reported through phrases such as, "...works hard.." or "...is a pleasure to have in class.."

Parent-teacher-student interviews are used in Senior High, Junior High and Elementary Schools to report on affective growth.

The Junior High School reports affective outcomes by using computer generated descriptors. Although some dissatisfaction with this method has been voiced, parents still see affective descriptors as important indicators of success at school.

The purpose of this project is to assist the schools in their struggles to report affective growth by determining specific behaviors which indicate growth; and by devising a comprehensive, specific and precise system for the reporting of growth in the affective domain.

Procedures

This research project began with a survey and a study of the extensive literature on the subject of affective education, its significance, its problems, its connection with other aspects of education and its manifestation in observable actions and products. The literature study covered a wide span of years of research, as well as a wide scope of types of research into affective outcomes. It included a review of literature from the Department of Education, the Lethbridge School District, Alberta Education, and the popular culture which makes affective outcome into marketable products.

The research then turned to the stakeholders of education in Lethbridge. Personal, open-ended, yet structured and focused interviews were conducted to find out what the stakeholders of education in Lethbridge saw as important in education. The interviews were designed to discover indicators of success which were in the affective domain. The data collected was descriptors of behavior which were seen to be evidence of growth and success at school. The open-ended interviews allowed for a wide variety of responses. These responses were recorded in plain view of the respondents who were asked for elaboration or clarification when required.

Sampling was purposive rather than random. Interviews were conducted with 90 persons. Those interviewed were students from grades 1 to 12, parents from each of the eight schools in the district, trustees, teachers and administrators from each school, clergy, professionals, business persons, post-secondary educators from the University of Lethbridge and the Lethbridge Community College, and professionals involved in Correctional work at such places as the Lethbridge Correctional Center and Mental Health Services.

Students were asked in clear and meaningful language to describe the behavior of students who do well in school. Adults were asked to describe signs of a quality education. The results of the interviews were studied to understand what expectations of quality were held by the stakeholders in education in Lethbridge. The interview data of descriptors of quality were then categorized into ten areas of similarity. Those ten areas, were analyzed and consolidated into five categories of behaviors and actions which indicated quality.

The categories of behaviors were separated into those outcomes which:

- gave purpose to LIFE in a spiritual sense;
- enhanced SELF esteem;
- resulted in better interpersonal relationships with OTHERS;
- showed concern for society and the larger WORLD;
- were conducive to more efficient LEARNING.

Categories of affective outcomes were also referred to in Rubin's research (Rubin, 1974).

Analysis of the interview data permitted the formation of four similar behaviors in each of these five categories. The 20 indicators were formed into a theoretical framework of signs of learning in the affective domain, and were taken to 17 more teachers to ask for their perceptions. The insights of the teachers were used to clarify and refine the list of behaviors and attitudes which the stakeholders of education in Lethbridge saw as indicators of growth in the affective domain.

Further analysis of the list of behaviors developed from the interview data revealed a commonality of behaviors within each of the categories. Within the area of behaviors responding to LIFE, SELF, OTHERS, the WORLD, and LEARNING there were indicators which:

- were overall assumptions or beliefs;
- gave hope and purpose to their actions;
- showed signs of charity, love or concern;
- were actions based on commitment.

A new and refined draft of behaviors which are seen as indicators of growth in the affective domain, was then mailed to 40 people for validation. The validators were asked if this list of 20 behaviors were indicators of growth in the affective domain; if there were additional indicators; and if there were more categories of behaviors.

Affective Behaviors

These behaviors are proposed as indicators of growth in the affective domain. Growth is demonstrated:

I. In Response to Spiritual Life, when a person:

1. Expresses belief in a system of values which distinguishes right from wrong by displaying truth, honesty, integrity and inner peace.
2. Exemplifies hope and purpose in life by using prudence and good judgment in wise decision making.
3. Exemplifies charity by showing love, acceptance, tolerance and reconciliation to others.
4. Displays selflessness through considerate, responsible and trustworthy behavior.

11. In Response to Self, when a person:

1. Exemplifies confidence, self-worth and trust by willingly taking risks and accepting error with security, ease and good humor.
2. Assumes responsibility by accepting consequences of actions, cooperating with leaders or assuming leadership roles.
3. Accepts that a wide range of emotions such as joy, sorrow, frustration, anger, jealousy or fear are appropriate human behavior by expressing and understanding emotions with increasing maturity.
4. Develops gifts and talents by showing diligence in work, perseverance in effort and pride in accomplishments.

III. In Response to Others, when a person:

1. Shows respect and consideration for authority while understanding the legitima-

cy of dissent by choosing appropriate manners to agree or disagree.
2. Shows appreciation for the accomplishments of others by affirming or encouraging them.
3. Accepts and respects the ideas, rights, property and personhood of others by using charitable words and actions.
4. Contributes to building school community by sharing ideas and working cooperatively.

IV. In Response to the World, when a person:

1. Displays active citizenship by involvement in volunteer endeavors.
2. Shows concern for the environment by careful and responsible use of natural resources.
3. Shows a concern for social justice and equality through a sense of fair play, social action and giving.
4. Responds to the expectations of the world of work by being present, punctual, attentive, prepared and good humored.

V. In Response to Learning, when a person:

1. Takes pleasure in the search for truth by being open and receptive to learning, affirming it and reflecting it with happiness and enthusiasm.
2. Displays self-direction and self-motivation by initiating activities, extending knowledge, exploring possibilities or creating.
3. Displays an open and inquisitive mind by accepting challenges, considering change, and attempting various problem-solving techniques.
4. Displays intellectual curiosity through the use of critical thinking and informed questioning.

These indicators are in the process of being made more precise, specific, and usable by identifying actions and behaviors which are appropriate as the child matures. The behaviors are being identified in consultation with teachers. From this list of specific behaviors, it will be possible to devise a system for reporting affective growth.

Discussion

Observations

1. There is intense interest in the affective domain. It is evident in the vast scope of research, debate, and literature on the affective domain and its pervading influence in other aspects of learning.

2. Interest in the importance of self-image and attitude to success in life comes through in the message of the popular culture, which makes the building of self-esteem into a marketable product.

3. The schools in the Lethbridge Catholic School District show interest in the affective domain by continually seeking ways of reporting affective growth to students and parents.

4. The elementary students of Lethbridge Catholic Schools who were asked to describe successful students in school used phrases such as 'they try their best' and 'they smile and like school'.

5. High School students who were asked for evidence of success at school often cited interpersonal relationships and behavior as well as attitude toward school.

6. When interviewed, parents often mentioned self-motivation, self-confidence and self-esteem as being qualities which indicate success at school.

7. Other community members cited open-mindedness, intellectual curiosity, values and attitudes as indicators of quality in education.

8. Notwithstanding the observed importance of the affective domain, there is no systematic method of recording and reporting affective growth.

Implications

The research into signs of learning in the affective domain has raised many questions:

1. In what ways can the recording and reporting of affective growth across the grades be accomplished?

2. What instruments can be used to report on the affective domain?

3. What type of inservice will be necessary so that teachers will be able to adopt a system of reporting affective growth.

4. What manifestations of the indicators are appropriate as the child matures?

5. How will the reporting of affective growth modify the reporting of Grade Twelve diploma examination results?

6. What effect will reporting on affective growth have on school programs, planning and instruction?

7. Most importantly, what effect will the recording and reporting of affective growth have on the students?

Conclusions

The enthusiasm with which the project has been received gives hope that the development of instrumentation will be accepted as a means of reporting affective growth.

References

Alberta Education. (1990). *Guide to Education Senior High School Handbook 1990-1991*. Edmonton.

Beane, James A. (1983). Self-Concept and Esteem in the Middle Level School. *NASSP Bulletin*, 67 (463), 63-71.

Beane, James A. (1986). The Continuing Controversy Over Affective Education. *Educational Leadership*, 43(4), 26-31.

Beane, James A. & Lipka, Richard P. (1984). *Self-Concept, Self-Esteem and the Curriculum*. Boston: Allyn & Bacon.

Bloom, Benjamin S. & Hastings, J. Thomas & Madaus, George F. (1971). *Handbook on Formative and Summative Evaluation of Student Learning*. New York: McGraw-Hill Book Co.

Bloom, Benjamin S. & Madaus, George F. & Hastings, J. Thomas. (1981). *Evaluation To Improve Learning*. New York: McGraw-Hill Book Co.

Glickman, Carl D. (1987). Good And/Or Effective Schools: What Do We Want? *Phi Delta Kappan*, 68(8), 622-624.

Krathwohl, David R. & Bloom, Benjamin S. & Masia, Bertram B. (1964). *Taxonomy of Educational Objectives Handbook II: The Affective Domain*. London: Longmans.

Rubin, Louis. (1973). Schooling and Life in Rubin, Louis J. (ed) *Facts & Feelings in the Classroom*. New York: Walker & Co.

Rubin, Louis. (1974). Curriculum, Affect and Humanism. *Educational Leadership*, 32(1), 10-13.

Rubin, Louis. (1982). Guest Editorial. *Educational Leadership*, 39(7).

Appendix A

AFFIRMATION OF STUDENTS AND STAFF

Lethbridge Catholic School District Policy adopted June 13, 1984

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1. A statement on affirmation adopted by the Board of Trustees draws attention to the need for acknowledgement of the presence and value of our colleagues, staff associates and students.

2. Affirmation has a special place in Catholic life. The great sacrament of Reconciliation recognizes our weaknesses, and in absolution declares people well again. Perhaps as a protest against emphasis on the negative aspects of behavior, some Catholic writers claim the failure to affirm as "the greatest sin." Everyone can affirm and everyone needs affirmation. Most people do their best when they do the commonplace; if affirmation awaits the heroic and the exceptional, then few will experience it. Affirmation as practiced in school acknowledges the importance and worth of people.

3. Without diminishing the need for honest feedback, and criticism on how we carry out our tasks, all members of the School District acknowledge the need for the act of affirmation of each person in the routine performance of his duties.

4. With respect to the student, the school aims to have each one graduate with a wholesome self image. Affirmation aims to prevent a person's failures and failings from destroying him. This means that our graduates, and others who leave our schools know their abilities and have joy in them; they know something of their limitations and can appraise their significance.

5. The Principal initiates a discussion of the practice of affirmation of students and staff with the entire school staff annually.

Appendix B

EVALUATION OF PROGRAMS

Lethbridge Catholic School District Policy adopted June 12, 1985

The School Board may require evaluation of a program within its jurisdiction for whatever reason it considers appropriate and at the times it considers most useful.

Background

From time to time, the School Board, its administration or teaching staff may discern a need to review a particular program in the District. In that event, the School Board calls for an evaluation of the program. The School Board has an abiding concern to ensure that the students develop a maturing Christian response as their schooling proceeds, and wants to ensure that the program provides that maturing, among whatever other program specific objectives belong to it.

Guidelines

1. Program means a set of independent activities and services designed to achieve specific organizational goals, policies and objectives. Examples of programs are: Mathematics 30; Vocational Education, Counselling, transportation and school modernization plan.

2. The evaluation assesses the effectiveness of the activities in the program against its goals, policies and objectives as specified in the Program of Studies and Curriculum Guide. The evaluation comments upon the appropriateness of the goals, policies and objectives. Where appropriate, evaluation will determine if the program affords the students with a developing understanding of the Gospel Message as it applies in the program.

3. The evaluation describes the program, identifies the number of students served, makes commendations and recommendations and determines the costs.

4. The evaluation group may consist of personnel from the School District staff along with consultative personnel from Lethbridge Regional Office of Education or other school jurisdictions as deemed desirable.

Appendix C

EVALUATION OF STUDENT PROGRESS - THE CELEBRATION OF LEARNING

Lethbridge Catholic School District Policy revised June 12, 1986

Ideals of hope, affirmation, reconciliation, and renewal direct and guide the processes of evaluation of student progress and the celebration of learning. The goals and objectives of the Lethbridge Catholic School District No. 9 and those of Alberta Education provide the basis for these processes.

Background

Each child, of infinite worth, as a child of God, merits the best attention of the school. Although teachers have a primary role in providing this attention during the process of evaluation, they act in the recognition of the love parents have for their children. The process of evaluation provides the students with a sense of hope and success. The Board of Trustees of Lethbridge Catholic School District No. 9 supports its teachers in their work of strengthening the students' confidence in their abilities.

Guidelines

1. The school and its classroom teachers attend to the development of each child's Christian maturity.

2. In each school the primary responsibility for the process of evaluation of student progress lies with the classroom teacher who develops a relationship of trust with the student and parents. The principal supplies leadership.

3. In evaluating student progress, the classroom teacher does so objectively, consistently fairly and justly with the goal of instilling hope in the students and affirming their God-given talents.

4. In the classroom setting the teacher has the responsibility and authority to make recommendations which seek the development of the student's self actualization.

5. The classroom teacher communicates clearly, precisely and in confidence such recommendations to other teachers, the principal, parents and students.

6. In the secondary school, the teacher informs the students and parents of the basis of the evaluation process. In the elementary schools, the classroom teacher will inform the parents, upon request, of the basis of the evaluation process.

7. The teacher and school use the evaluation of student progress as a means of celebrating the achievement of the students.

Appendix D

ROLE OF THE PRINCIPAL

Lethbridge Catholic School District Policy adopted March 28, 1984

1. The Principal leads the school: whether he acts or not, he determines the school as no other person does.

1.1 In a Catholic School the principal creates a climate for the spiritual development of the staff and students; he applies Gospel values to the management of the school, and so aims to assist his students to see themselves in relation to the Gospel message of love, and to develop a healthy self-concept.

1.2 The principal serves as instructional leader of the school, he understands and accepts the social role of the school. He has a commitment to personal growth in education: he learns and studies.

1.3 The principal administers the school. He seeks to maintain a collegial relationship with other teachers on his staff. He works with other members of the administrative staff on the implementation of School Board policies. He manages the resources of the school and serves the staff and students. He provides for the safety and comfort of staff and students.

1.4 The principal accepts the parents as the primary educators of the children: they have the chief responsibility for their children's education and a great influence on it.

2. The Responsibilities of the Role

2.1 The principal works together with the staff, parish priests and religion consultant to influence the school with the Gospel message. He arranges for celebrations acknowledging the liturgical calendar and significant events in the lives of his students and staff. He seeks to develop a supportive environment so the child develops as a whole person. He understands the meaning of visibility in the Catholic Community.

2.2 The principal explains the school to interested persons. He accounts for the achievement of the students. He helps teachers interpret the achievement of children. He establishes a climate of openness in the school and welcomes visitors to the school. He knows and makes use of the resources and services of the community. He works with his staff in the development of an appropriate array of co-curricular activities.

2.3 The principal supervises instruction, consults with teachers and other responsible personnel to ensure the implementation of the curriculum as required by law, regulation and School Board decision. He assists teachers to employ new methods and materials. He encourages teachers to invent. The principal identifies in-service needs of staff and arranges ways of meeting them. He participates in the selection of staff. He assigns teachers to subject areas of greatest teaching effectiveness.

2.4 The principal seeks to recognize the talents in each child and promotes their development. The principal works with parents and teachers in identifying and developing these talents; he readily consults with them on the needs and

opportunities for growth and development of the student. He attempts to match children and teachers based upon learning and teaching styles.

2.5 The principal enjoys and respects the collegial relationship he has with other administrators and members of the Principals' Association.

2.6 The principal inspects the school plant and school grounds regularly and recommends needed changes. He provides routine supervision of the plant and facilities. He ensures the procurement of materials and supplies for the school, directs the preparation of the annual budget, and looks to the ordering of those same items from suppliers.

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